

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.

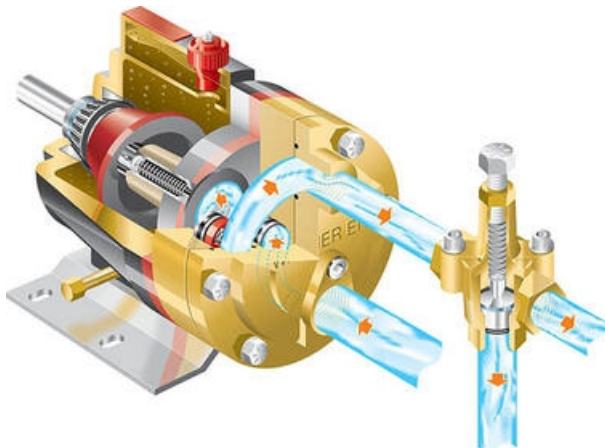
Pumparna har ingen genomgående axel med tätningar och mediet kommer aldrig i kontakt med mekanismen.

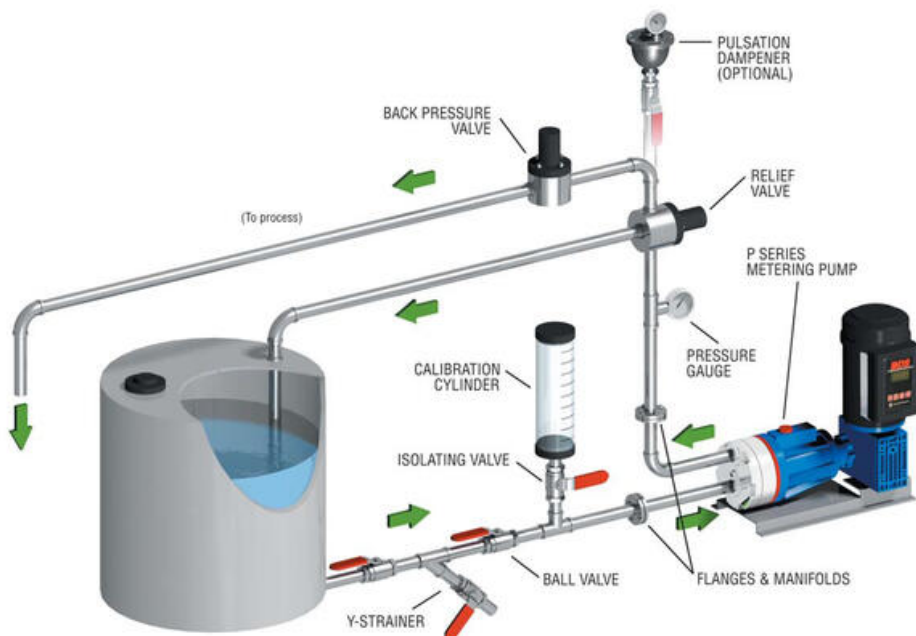
Membranen är avlastade med jämnt tryck över hela ytan, vilket ger dem mycket lång livslängd.

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.

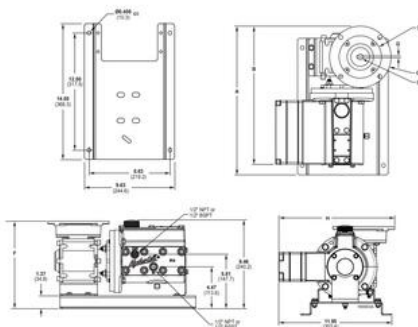
*** För applikationer i explosionsfarlig miljö kontakta oss.

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Teknisk data

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

P300 Models with Metallic Pumping Head

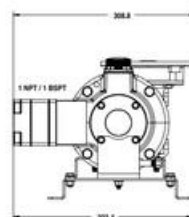
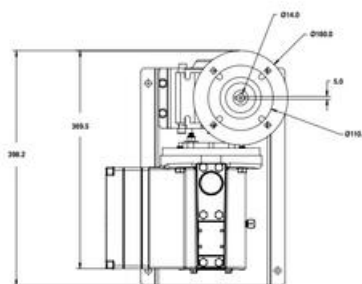


Dimensions in Inches (Millimeters)

Model	A	B	C	D	E	F	G	H
NEMA 340	16.75	16.75	16.75	16.75	16.75	16.75	16.75	16.75
NEMA 350	18.75	18.75	18.75	18.75	18.75	18.75	18.75	18.75
IEC 63 B3	16.75	16.75	16.75	16.75	16.75	16.75	16.75	16.75
IEC 71 B3	18.75	18.75	18.75	18.75	18.75	18.75	18.75	18.75
IEC 80 B3	20.75	20.75	20.75	20.75	20.75	20.75	20.75	20.75

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
10.0	10.0	1.0	10.0
15.0	15.0	1.0	15.0
20.0	20.0	1.0	20.0
25.0	25.0	1.0	25.0
30.0	30.0	1.0	30.0
35.0	35.0	1.0	35.0
40.0	40.0	1.0	40.0
45.0	45.0	1.0	45.0
50.0	50.0	1.0	50.0
55.0	55.0	1.0	55.0
60.0	60.0	1.0	60.0
65.0	65.0	1.0	65.0
70.0	70.0	1.0	70.0
75.0	75.0	1.0	75.0
80.0	80.0	1.0	80.0
85.0	85.0	1.0	85.0
90.0	90.0	1.0	90.0
95.0	95.0	1.0	95.0

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
10.0	10.0	10.0	100.0
15.0	15.0	10.0	150.0
20.0	20.0	10.0	200.0
25.0	25.0	10.0	250.0
30.0	30.0	10.0	300.0
35.0	35.0	10.0	350.0
40.0	40.0	10.0	400.0
45.0	45.0	10.0	450.0
50.0	50.0	10.0	500.0
55.0	55.0	10.0	550.0
60.0	60.0	10.0	600.0
65.0	65.0	10.0	650.0
70.0	70.0	10.0	700.0
75.0	75.0	10.0	750.0
80.0	80.0	10.0	800.0
85.0	85.0	10.0	850.0
90.0	90.0	10.0	900.0
95.0	95.0	10.0	950.0

- 1. The motor RPM and based on ambient temperature conditions up to 40°C. For ambient temperatures above 40°C, please contact Western International.
- 2. Contact factory for performance specifications.
- 3. Based on using 60 Hertz.
- 4. Maximum continuous motor speed is 100 rpm at full pressure.
- 5. For maximum or reduced pressure ratings, please contact Western International.

Mechanical Adjustment Controller for ATEX/Explosive Areas

Motor Size	Max Flow	Max Flow	Pump Size	Gear Ratio	Model Number	Required Motor Size & Frame
1.0	10.0	10.0	1.0	1.0	8013-8014	0.75kW / EC 71 / A 30a
1.3	15.0	15.0	1.3	1.0	8015-8016	0.75kW / EC 71 / A 30a
1.5	20.0	20.0	1.5	1.0	8017-8018	0.75kW / EC 71 / A 30a
1.7	25.0	25.0	1.7	1.0	8019-8020	0.75kW / EC 71 / A 30a
2.0	30.0	30.0	2.0	1.0	8021-8022	0.75kW / EC 71 / A 30a
2.5	35.0	35.0	2.5	1.0	8023-8024	0.75kW / EC 71 / A 30a
3.0	40.0	40.0	3.0	1.0	8025-8026	0.75kW / EC 71 / A 30a
3.5	45.0	45.0	3.5	1.0	8027-8028	0.75kW / EC 71 / A 30a
4.0	50.0	50.0	4.0	1.0	8029-8030	0.75kW / EC 71 / A 30a

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	
4.939 (5)	4.882 (5)	4.607 (5)	4.272 (5)	45	40:1	
6.639 (5)	6.548 (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)	9.388 (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 (5)	240	7.5:1	
40.63 (5)	39.87 (5)	37.93 (1)	36.08 (5)	360	5:1	
54.23 (5)	53.20 (5)	50.63 (5)	48.19 (5)	480	7.5:1	3600
81.42 (5)	79.85 (1)	76.02 (2)	72.43 (3)	720	5:1	

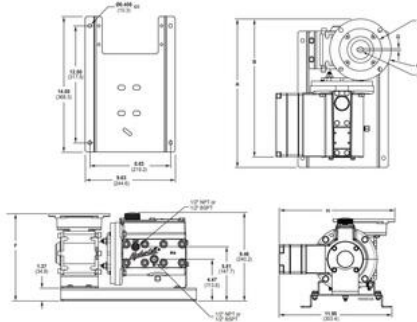
1) Required Motor hp

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 (0.50)	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 (0.75)	60	25:1	
31.66 (0.18)	31.17 (0.18)	29.55 (0.37)	27.81 (0.75)	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)	59.59 (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	
256.8 (0.55)	251.9 (0.75)	239.8 (1.5)	228.5 (1.5)	600	5:1	

1) Required Motor kW

P300 Models with Metallic Pumping Head

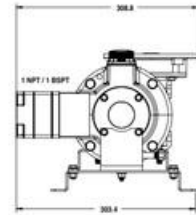
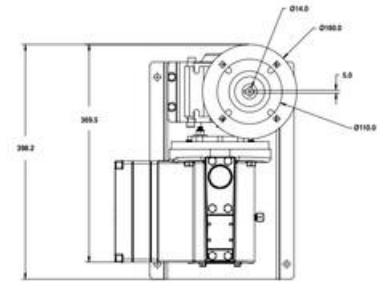


Dimensions in Inches (Millimeters)

Model	A	B	C	D	E	F	G (Flange)	H
NEMA-300	16.76	20.03	24.32	24.32	24.32	24.32	1.35	11.00
NEMA	16.76	16.75	21.34	21.34	21.34	21.34	1.35	11.00
IEC-80-80	16.28	16.28	21.34	21.34	21.34	21.34	1.35	11.00
IEC 75-75	15.87	15.87	21.34	21.34	21.34	21.34	1.35	11.00
IEC 60-60	15.46	15.46	21.34	21.34	21.34	21.34	1.35	11.00

Representative Drawings (mm)

Metallic Pump Heads



Performance - Flow Capacities and Pressure Ratings

For Synchronous Speed, Self-cooled Motors

For 10:1 Turndown, Self-cooled Motors

Lhr Maximum Flow at Designated Pressure

Lhr Maximum Flow at Designated Pressure

Lhr Metallic Pump Heads Only					Lhr Metallic Pump Heads Only				
2 Bar	10 Bar	34 Bar	103 Bar	172 Bar	2 Bar	10 Bar	34 Bar	103 Bar	172 Bar
10.2	10.2	9.5	8.6	8.0	10.2	10.2	9.5	8.6	8.0
12.2	12.2	11.5	10.6	10.0	12.2	12.2	11.5	10.6	10.0
15.6	15.6	14.8	13.8	13.1	15.6	15.6	14.8	13.8	13.1
20.9	20.9	19.9	18.8	18.0	20.9	20.9	19.9	18.8	18.0
25.2	25.2	24.1	23.0	22.1	25.2	25.2	24.1	23.0	22.1
31.7	31.7	29.5	28.3	27.3	31.7	31.7	29.5	28.3	27.3
42.4	42.4	39.9	38.6	37.5	42.4	42.4	39.9	38.6	37.5
63.8	63.8	60.9	59.5	58.4	63.8	63.8	60.9	59.5	58.4
85.3	85.3	82.0	80.5	79.4	85.3	85.3	82.0	80.5	79.4
128.2	128.2	124.5	122.8	121.6	128.2	128.2	124.5	122.8	121.6
171.1	171.1	166.8	165.0	164.2	171.1	171.1	166.8	165.0	164.2
256.8	256.8	251.9	249.9	249.1	256.8	256.8	251.9	249.9	249.1

- 1. The motor hp are based on ambient temperature conditions up to 40°C. For ambient temperatures above 40°C, please contact Western International.
- 2. Contact Western for performance specifications.
- 3. Based on using 60 cycles.
- 4. Maximum continuous motor speed is 1800 rpm at full pressure.
- 5. For synchronous or reduced speed motor, please contact Western International.

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	
4.939 (5)	4.882 (5)	4.607 (5)	4.272 (5)	45	40:1	
6.639 (5)	6.548 (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)	9.388 (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 (5)	240	7.5:1	
40.63 (5)	39.87 (5)	37.93 (1)	36.08 (5)	360	5:1	
54.23 (5)	53.20 (5)	50.63 (5)	48.19 (5)	480	7.5:1	
81.42 (5)	79.85 (1)	76.02 (2)	72.43 (3)	720	5:1	

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 (0.50)	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 (0.75)	60	25:1	
31.66 (0.18)	31.17 (0.18)	29.55 (0.37)	27.81 (0.75)	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)	59.59 (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	
256.8 (0.55)	251.9 (0.75)	239.8 (1.5)	228.5 (1.5)	600	5:1	

1) Required Motor kW

Mechanical Adjustment Controller for ATEX/Explosive Areas

All Min/Max flow rates in litres/hour

Min flow	103 bar		Pump rpm	Gearbox Ratio	Model Number	Required Motor Size & Power
	Max flow	Min flow				
1.0	1.0	0.1	5-20	20:1	803-10014	0.25kW / EC 11 / 4.5hp
1.4	1.4	0.1	5-30	20:1	803-10014	0.25kW / EC 11 / 4.5hp
2.0	2.0	0.1	5-40	15:1	803-10014	0.25kW / EC 11 / 4.5hp
3.0	3.0	0.1	5-60	10:1	803-10014	0.25kW / EC 11 / 4.5hp
4.0	4.0	0.1	5-80	7.5:1	803-10014	0.25kW / EC 11 / 4.5hp
6.0	6.0	0.1	5-120	5:1	803-10014	0.25kW / EC 11 / 4.5hp
10.0	10.0	0.1	5-180	3:1	803-10014	0.25kW / EC 11 / 4.5hp
15.0	15.0	0.1	5-240	2:1	803-10014	0.25kW / EC 11 / 4.5hp