

P200

Doseringspump

P200MSESA10S PUMP WITH GEARBOX AND BASEPLATE



- 1 - 300 l/h
- Tryck max. 70 bar
- Plast eller metallutförande
- Tätningslös och klarar torrkörning
- 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.

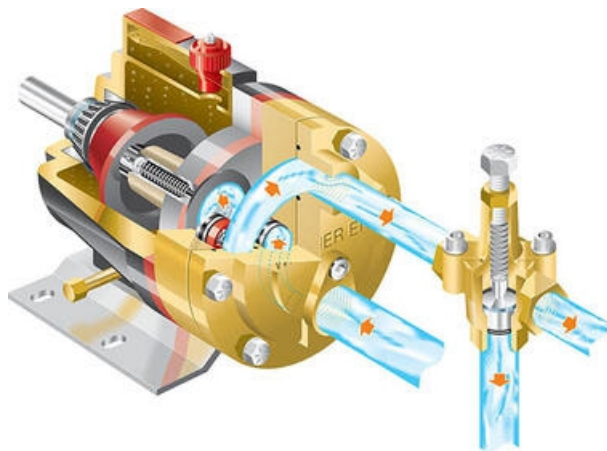
Pumparna har ingen genomgående axel med tätningar och mediet kommer aldrig i kontakt med mekanismen.

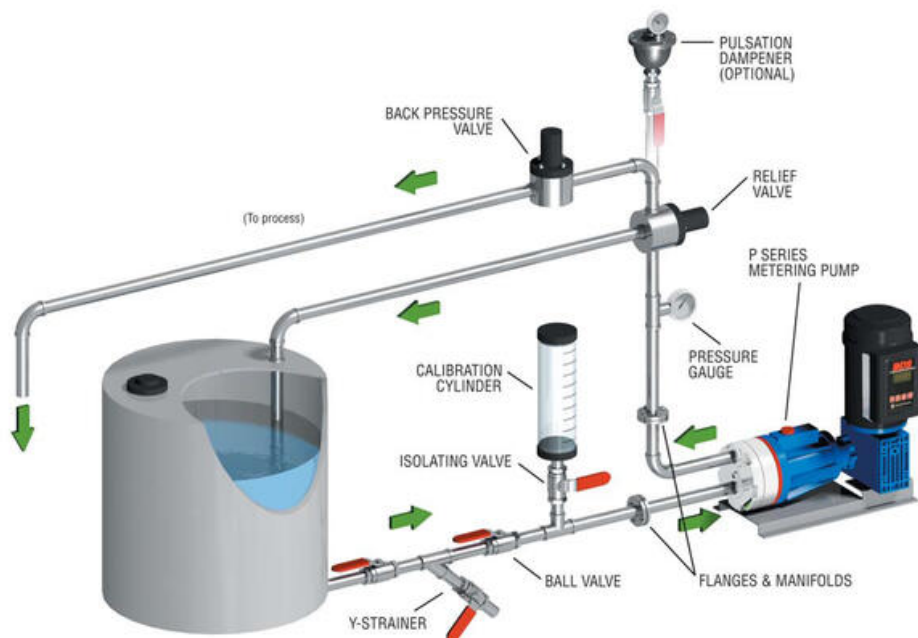
Membranen är avlastade med jämnt tryck över hela ytan, vilket ger dem mycket lång livslängd.

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

Hydra-Cell pumparna möter de flesta och överträffar flera 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, Polypropylen, Kynar
Membran O-ringar	Aflas, EPDM, FKM, PTFE, Neoprene, Buna-N
Ventilsäten	316L, Hastelloy C, Keramik
Ventiler	Nitronic 50, Hastelloy C, Keramik
Fjäder	Elgiloy, Hastelloy C
Fjäderhållare	Polypropylen, PVDF, Hastelloy C
Flöde	1 - 300 l/h
Tryck metallutförande	Max. 70 bar
Tryck plastutförande	Polypropylen Max. 17 bar, Kynar Max 24 bar
Inloppstryck	Max. 17 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 metallutförande	17,7 kg
Vikt plastutförande	13,6 kg

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

** Vid viskositeter över 500 cp kontakta oss.

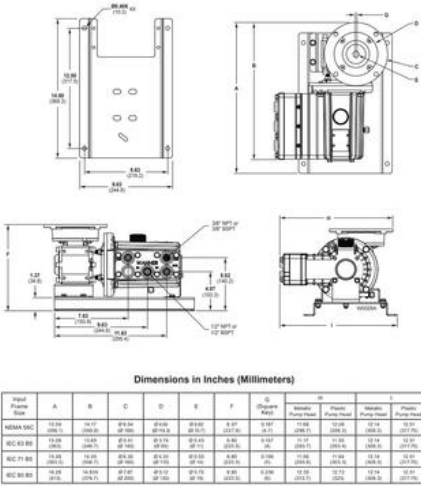
*** För applikationer i explosionsfarlig miljö kontakta oss.

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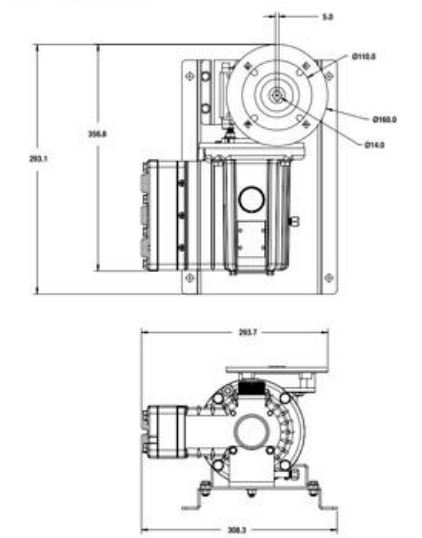
Teknisk data

Flöde max	76 l/h
Tryck max	70 bar
Systemtryck max	17 bar
Anslutning inlopp	1/2" BSPT
Anslutning utlopp	3/8" BSPT
Material Bottenplatta	Rostfritt stål
Material Fjäderhållare	Hastelloy C
Material Membran	EPDM
Material Pumphus	SS 316
Material Ventiler	Nitronic 50
Material Ventilfjädrar	Elgiloy
Material Ventilsäten	SS 316
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	0,95 l
1098_Particle size (mm)	Max. 0,2mm
Vikt	19 kg

P200 Models: Metallic and Non-Metallic



Representative Drawings (mm)



P200 Specifications (Cont'd)

Performance Maximum Flow at Designated Pressure - Imperial

All Pumps (gph)	Metallic Pump Heads Only (gph)	Pump rpm	Gear Ratio	Motor rpm
100 psi	250 psi	500 psi	1000 psi	
3,378 (126)	3,321 (124)	3,249 (121)	3,126 (115)	30
4,059 (150)	3,984 (148)	3,911 (146)	3,770 (142)	36
5,072 (191)	5,015 (190)	4,908 (186)	4,748 (180)	45
6,758 (256)	6,686 (254)	6,555 (250)	6,353 (241)	60
8,107 (308)	8,022 (306)	7,873 (302)	7,637 (287)	72
10,130 (386)	10,027 (384)	9,849 (378)	9,563 (362)	90
13,503 (513)	13,369 (510)	13,144 (503)	12,777 (488)	120
20,248 (770)	20,052 (766)	19,733 (750)	19,193 (723)	180
26,993 (1,027)	26,735 (1,020)	26,322 (1,007)	25,622 (975)	240
40,483 (1,540)	40,101 (1,534)	39,492 (1,509)	38,462 (1,470)	360
53,977 (2,044)	53,477 (2,029)	52,666 (2,007)	51,301 (1,975)	480
80,955 (3,072)	80,203 (3,039)	79,011 (3,000)	76,982 (2,961)	720

Required Motor hp

Performance Maximum Flow at Designated Pressure - Metric

All Pumps (lph)	Metallic Pump Heads Only (lph)	Pump rpm	Gear Ratio	Motor rpm
7 bar	17 bar	34 bar	69 bar	
10.65 (0.18)	10.48 (0.18)	10.25 (0.18)	9.868 (0.25)	25
12.81 (0.18)	12.60 (0.18)	12.34 (0.18)	11.91 (0.37)	30
16.00 (0.18)	15.82 (0.18)	15.48 (0.18)	14.96 (0.37)	37.5
21.32 (0.18)	21.09 (0.18)	20.68 (0.18)	20.04 (0.37)	50
25.57 (0.18)	25.31 (0.18)	24.83 (0.18)	24.09 (0.37)	60
31.96 (0.18)	31.63 (0.18)	31.07 (0.18)	30.17 (0.37)	75
42.59 (0.18)	42.17 (0.18)	41.46 (0.18)	40.29 (0.37)	100
63.87 (0.18)	63.25 (0.18)	62.23 (0.25)	60.55 (0.55)	150
85.15 (0.18)	84.34 (0.18)	83.01 (0.25)	80.80 (0.55)	200
127.7 (0.18)	126.5 (0.18)	124.6 (0.27)	121.3 (0.79)	300
170.3 (0.18)	168.7 (0.37)	166.1 (0.55)	161.8 (0.79)	400
255.4 (0.18)	253.0 (0.55)	249.2 (0.55)	242.8 (0.79)	600

Required Motor kW

Performance - Flow Capacities and Pressure Ratings

For Synchronous Speed, Self-cooled Motors
Lhr Maximum Flow at Designated Pressure

Lhr All Pumps 2 Bar	Lhr Metallic Pump Heads Only 2 Bar	Pump RPM	Gear Ratio	Motor RPM
10.6	10.5	10.2	9.9	25
12.8	12.6	12.3	11.9	30
16.0	15.8	15.5	15.0	37.5
21.3	21.1	20.7	20.0	50
25.6	25.3	24.9	24.1	60
31.9	31.6	31.1	30.2	75
42.6	42.2	41.5	40.1	100
63.9	63.2	62.2	60.5	150
85.2	84.3	83.0	80.8	200
127.7	126.5	124.6	121.3	300
170.3	168.7	166.1	161.8	400
255.4	253.0	249.2	242.8	600

Required Motor kW

- 1. The motor kW are based on ambient temperature conditions up to 40°C. For ambient temperatures above 40°C, please contact Boreas International.
- 2. Based on using 60 Hz motors.
- 3. For synchronous or self-cooled motors, please contact Boreas International.

For 10:1 Turndown, Self-cooled Motors
Lhr Maximum Flow at Designated Pressure

Lhr All Pumps 2 Bar	Lhr Metallic Pump Heads Only 2 Bar	Pump RPM	Gear Ratio	Motor RPM
10.6	10.5	10.2	9.9	25
12.8	12.6	12.3	11.9	30
16.0	15.8	15.5	15.0	37.5
21.3	21.1	20.7	20.0	50
25.6	25.3	24.9	24.1	60
31.9	31.6	31.1	30.2	75
42.6	42.2	41.5	40.1	100
63.9	63.2	62.2	60.5	150
85.2	84.3	83.0	80.8	200
127.7	126.5	124.6	121.3	300
170.3	168.7	166.1	161.8	400
255.4	253.0	249.2	242.8	600

Required Motor kW

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- 2. Based on using 60 Hz motors.
- 3. For synchronous or self-cooled motors, please contact Boreas International.

Mechanical Adjustment Controller for ATEX/Explosive Areas

All Min/Max flow rates in lph/hrs

2 bar	17 bar	34 bar	69 bar	Pump rpm	Gear Ratio	Motor rpm	Required Motor Size & Horse
10.6	10.5	10.2	9.9	25			
12.8	12.6	12.3	11.9	30			
16.0	15.8	15.5	15.0	37.5			
21.3	21.1	20.7	20.0	50			
25.6	25.3	24.9	24.1	60			
31.9	31.6	31.1	30.2	75			
42.6	42.2	41.5	40.1	100			
63.9	63.2	62.2	60.5	150			
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6,758 (256)	6,686 (254)	6,555 (250)	6,353 (241)	60
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25.57 (0.18)	25.31 (0.18)	24.83 (0.18)	24.09 (0.37)	60
31.96 (0.18)	31.63 (0.18)	31.07 (0.18)	30.17 (0.37)	75
42.59 (0.18)	42.17 (0.18)	41.46 (0.18)	40.29 (0.37)	100
63.87 (0.18)	63.25 (0.18)	62.23 (0.25)	60.55 (0.55)	150
85.15 (0.18)	84.34 (0.18)	83.01 (0.25)	80.80 (0.55)	200
127.7 (0.18)	126.5 (0.18)	124.6 (0.27)	121.3 (0.79)	300
170.3 (0.18)	168.7 (0.37)	166.1 (0.55)	161.8 (0.79)	400
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21.3	21.1	20.7	20.0	50
25.6	25.3	24.9	24.1	60
31.9	31.6	31.1	30.2	75
42.6	42.2	41.5	40.1	100
59.9	59.2	58.2	56.5	150
85.2	84.3	83.0	80.8	200
127.7	126.5	124.6	121.3	300
176.6	168.7	166.1	161.8	400
256.6	253.0	249.3	245.0	500