Telfa AB
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075-24 24 450 | info@telfa.se | www.telfa.se

P200

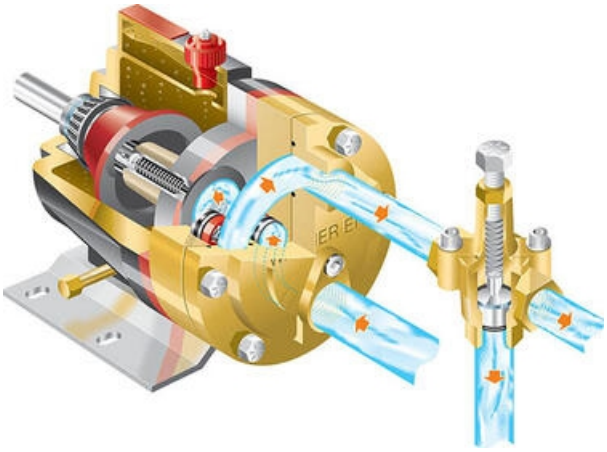
Doseringspump

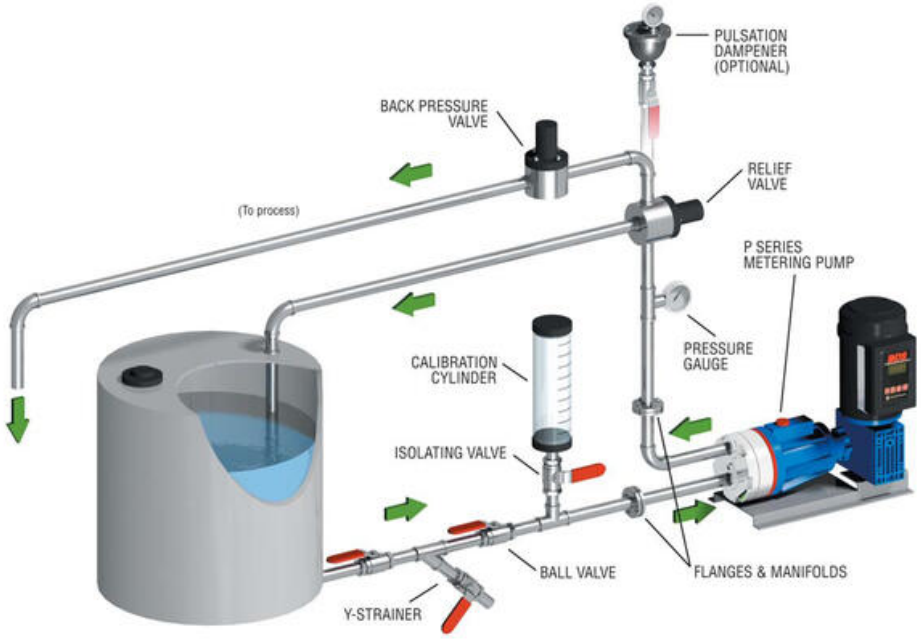
P200MSESSA15S
PUMP WITH GEARBOX AND BASEPLATE

- 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.

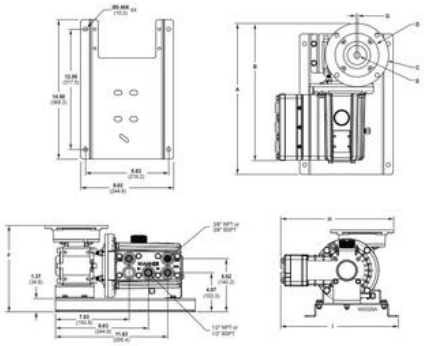
Pumphus	Mässing, 316L, Hastelloy C, Polypropylen, Kynar
Membran O-ringar	Aflas, EPDM, FKM, PTFE, Neoprene, Buna-N
Ventilsäten	316L, Hastelloy C, Keramik
Ventiler	Nitronic 50, Hastelloy C, Keramik
Fjäder	Elgiloy, Hastelloy C
Fjäderhållare	Polypropylen, PVDF, Hastelloy C
Flöde	1 - 300 l/h
Tryck metallutförande	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.
;

Teknisk data

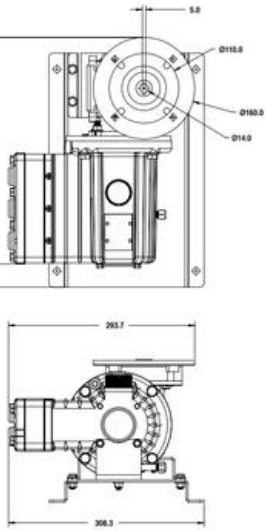
Flöde max	50 l/h
Tryck max	70 bar
Systemtryck max	17 bar
Anslutning inlopp	1/2" BSPT
Anslutning utlopp	3/8" BSPT
Material Bottenplatta	Rostfritt stål
Material Fjäderhållare	Hastelloy C
Material Membran	EPDM
Material Pumphus	SS 316
Material Ventiler	Nitronic 50
Material Ventilfjädrar	Elgiloy
Material Ventilsäten	SS 316
Axeldimension	Hålaxel 14 mm
Rotation	Valfri
Utväxling	15:1 - IEC 71-B5
Temperaturområde till	120 °C
Viskositet max	1000 cP
Olja	Livsmedelsolja H1 (K)
Oljevolym Hydrauldel	0,95 l
Particle size	Max. 0,2mm
Vikt	19 kg

P200 Models: Metallic and Non-Metallic



Dimensions in Inches (Millimeters)

Input Frame Size	A	B	C	D	E	F	G (Square Key)	H Metallic Pump Head	H Plastic Pump Head	I Metallic Pump Head	I Plastic Pump Head
NEMA 56C	10.59 (269.1)	14.17 (360.0)	Ø 6.94 (Ø 176.3)	Ø 6.00 (Ø 152.4)	Ø 6.00 (Ø 152.4)	6.97 (177.0)	0.187 (4.7)	11.68 (296.7)	12.09 (306.9)	12.14 (308.5)	12.51 (317.75)
IEC 63 B5	10.08 (280.5)	13.65 (346.7)	Ø 5.51 (Ø 140)	Ø 5.74 (Ø 145)	Ø 5.43 (Ø 111)	6.82 (233.5)	0.157 (4)	11.17 (283.7)	11.50 (292.4)	12.14 (308.5)	12.51 (317.75)
IEC 71 B5	11.69 (302.5)	14.65 (398.7)	Ø 6.30 (Ø 160)	Ø 6.50 (Ø 165)	Ø 6.50 (Ø 165)	6.82 (233.5)	0.198 (5)	11.66 (296.8)	11.66 (303.5)	12.14 (308.5)	12.51 (317.75)
IEC 80 B5	14.29 (413)	14.606 (374.7)	Ø 7.87 (Ø 200)	Ø 7.48 (Ø 190)	Ø 7.72 (Ø 196)	9.80 (233.5)	0.236 (6)	12.55 (312.7)	12.72 (323)	12.14 (308.5)	12.51 (317.75)



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 (¼)	3.321 (¼)	3.249 (¼)	3.128 (¼)	30	60:1	1800
4.059 (¼)	3.994 (¼)	3.911 (¼)	3.776 (¼)	36	50:1	
5.072 (¼)	5.015 (¼)	4.908 (¼)	4.748 (¼)	45	40:1	
6.758 (¼)	6.686 (¼)	6.555 (¼)	6.353 (¼)	60	30:1	
8.107 (¼)	8.022 (¼)	7.873 (¼)	7.637 (¼)	72	25:1	
10.130 (¼)	10.027 (¼)	9.849 (¼)	9.563 (¼)	90	20:1	
13.503 (¼)	13.369 (¼)	13.14 (¼)	12.77 (½)	120	15:1	
20.248 (¼)	20.052 (¼)	19.73 (¼)	19.19 (½)	180	10:1	
26.993 (¼)	26.735 (¼)	26.32 (½)	25.62 (½)	240	7.5:1	
40.483 (¼)	40.101 (½)	39.49 (½)	38.46 (½)	360	5:1	
53.97 (½)	53.47 (½)	52.66 (½)	51.30 (1)	480	7.5:1	3600
80.95 (½)	80.20 (½)	79.01 (½)	76.98 (1.5)	720	5:1	

( ) 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	60:1	1500
12.81 (0.18)	12.60 (0.18)	12.34 (0.18)	11.91 (0.37)	30	50:1	
16.00 (0.18)	15.82 (0.18)	15.48 (0.18)	14.98 (0.37)	37.5	40:1	
21.32 (0.18)	21.09 (0.18)	20.68 (0.18)	20.04 (0.37)	50	30:1	
25.57 (0.18)	25.31 (0.18)	24.83 (0.18)	24.09 (0.37)	60	25:1	
31.96 (0.18)	31.63 (0.18)	31.07 (0.18)	30.17 (0.37)	75	20:1	
42.59 (0.18)	42.17 (0.18)	41.46 (0.18)	40.29 (0.37)	100	15:1	
63.87 (0.18)	63.25 (0.18)	62.23 (0.25)	60.55 (0.55)	150	10:1	
85.15 (0.18)	84.34 (0.18)	83.01 (0.25)	80.80 (0.55)	200	7.5:1	
127.7 (0.18)	126.5 (0.18)	124.6 (0.37)	121.3 (0.75)	300	5:1	
170.3 (0.18)	168.7 (0.37)	166.1 (0.55)	161.8 (0.75)	400	7.5:1	3000
255.4 (0.18)	253.0 (0.55)	249.2 (0.55)	242.8 (0.75)	600	5:1	

( ) Required Motor kW

Performance - Flow Capacities and Pressure Ratings

For Synchronous Speed, Self-cooled Motors
L/hr Maximum Flow at Designated Pressure

L/hr All Pumps 2 Bar	17 Bar	L/hr Metallic Pump Heads Only 34 Bar	69 Bar	Pump RPM	Gear Ratio	Motor RPM
10.6	10.5	10.2	9.9	25	60:1	1500
12.8	12.6	12.3	11.9	30	50:1	
16.0	15.8	15.5	15.0	37.5	40:1	
21.3	21.1	20.7	20.0	50	30:1	
25.5	25.3	24.8	24.1	60	25:1	
32.0	31.6	31.1	30.2	75	20:1	
42.6	42.2	41.5	40.3	100	15:1	
63.9	63.3	62.2	60.5	150	10:1	
85.1	84.3	83.0	80.8	200	7.5:1	3000
127.7	126.5	124.6	121.3	300	5:1	
170.3	168.7	166.1	161.8	400	7.5:1	
255.4	253.0	249.2	242.8	600	5:1	

Required Motor kW

0.18	0.25	0.37

Notes:
a. The motor kW are based on ambient temperature conditions up to 40°C. For ambient temperatures above 40°C, please contact Wanner International.
b. Contact factory for performance specifications.
c. Based on using IEc motors.
d. Maximum continuous motor speed is 1800 rpm at full pressure.
e. For intermittent or reduced pressure duties, please contact Wanner International.

For 10:1 Turndown, Self-cooled Motors
L/hr Maximum Flow at Designated Pressure

L/hr All Pumps 2 Bar	17 Bar	L/hr Metallic Pump Heads Only 34 Bar	69 Bar	Pump RPM	Gear Ratio	Motor RPM
10.6	10.5	10.2	9.9	25	60:1	1500
12.8	12.6	12.3	11.9	30	50:1	
16.0	15.8	15.5	15.0	37.5	40:1	
21.3	21.1	20.7	20.0	50	30:1	
25.5	25.3	24.8	24.1	60	25:1	
32.0	31.6	31.1	30.2	75	20:1	
42.6	42.2	41.5	40.3	100	15:1	
63.9	63.3	62.2	60.5	150	10:1	
85.1	84.3	83.0	80.8	200	7.5:1	3000
127.7	126.5	124.6	121.3	300	5:1	
170.3	168.7	166.1	161.8	400	7.5:1	
255.4	253.0	249.2	242.8	600	5:1	

Required Motor kW

0.18	0.25	0.37	0.55	0.75	1.5

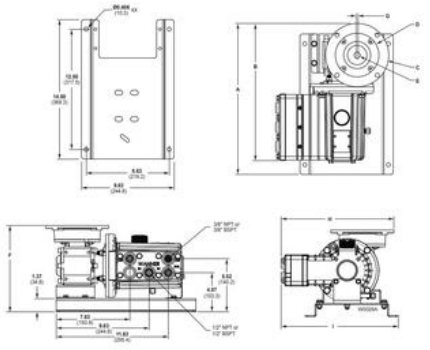
Notes:
a. The motor kW are based on ambient temperature conditions up to 25°C. For ambient temperatures above 25°C, Force-cooled Motors may be required. Please contact Wanner International.
b. Contact factory for performance specifications.
c. Based on using IEc motors.
d. Maximum continuous motor speed is 1800 rpm at full pressure.
e. For intermittent or reduced pressure duties, please contact Wanner International.

See Page 6 for Electronic Flow Rate Controller.

Mechanical Adjustment Controller for ATEX/Explosive Areas
All Min/Max flow rates in litres/hour

7 bar		17 bar		34 bar		69 bar		Pump rpm	Gearbox Ratio	Model Number	Required Motor Size & Frame
Min	Max	Min	Max	Min	Max	Min	Max				
2.0	10.2	1.9	10.0	1.9	9.8	1.6	9.4	5 - 24	25:1	80C3 - 7181K	0.25kW / IEC 71 / 4 Pole
	12.8		12.6		12.3		11.8	5 - 30	20:1		
	17.1		16.9		16.5		16.0	5 - 40	15:1		
	25.6		25.3		24.8		24.1	5 - 60	10:1		
	34.1		33.7		33.1		32.2	5 - 80	7.5:1		
	51.1		50.6		49.8		48.4	5 - 120	5:1		0.37kW / IEC 71 / 4 Pole
	68.1		67.5		66.4		64.6	5 - 160	7.5:1		0.55kW / IEC 71 / 2 Pole
	102.2		101.2		99.6		97.0	5 - 240	5:1	80E5 - 8081K	0.75kW / IEC 80 / 2 Pole

P200 Models: Metallic and Non-Metallic

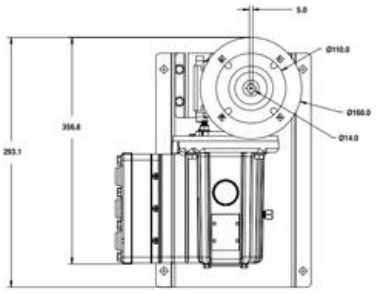


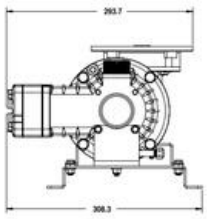
Dimensions in Inches (Millimeters)

Input Frame Size	A	B	C	D	E	F	G (Square Key)	H Metallic Pump Head	H Plastic Pump Head	I Metallic Pump Head	I Plastic Pump Head
NEMA 56C	10.59 (269.1)	14.17 (360.0)	Ø 6.94 (Ø 176.3)	Ø 6.00 (Ø 152.4)	Ø 6.00 (Ø 152.4)	6.97 (177.0)	0.187 (4.7)	11.68 (296.7)	12.09 (306.9)	12.14 (308.5)	12.51 (317.75)
IEC 63 B5	10.08 (280.5)	13.65 (346.7)	Ø 5.51 (Ø 140)	Ø 5.74 (Ø 145)	Ø 5.43 (Ø 111)	6.82 (233.5)	0.157 (4)	11.17 (283.7)	11.50 (292.4)	12.14 (308.5)	12.51 (317.75)
IEC 71 B5	11.69 (302.5)	14.65 (398.7)	Ø 6.30 (Ø 160)	Ø 6.50 (Ø 165)	Ø 6.50 (Ø 165)	6.82 (233.5)	0.198 (5)	11.66 (296.8)	11.66 (303.5)	12.14 (308.5)	12.51 (317.75)
IEC 80 B5	14.29 (413)	14.606 (374.7)	Ø 7.87 (Ø 200)	Ø 7.48 (Ø 190)	Ø 7.72 (Ø 196)	9.80 (233.5)	0.236 (6)	12.55 (312.7)	12.72 (323)	12.14 (308.5)	12.51 (317.75)

Representative Drawings (mm)

Metallic Pump Heads





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 (¼)	3.321 (¼)	3.249 (¼)	3.128 (¼)	30	60:1	1800
4.059 (¼)	3.994 (¼)	3.911 (¼)	3.776 (¼)	36	50:1	
5.072 (¼)	5.015 (¼)	4.908 (¼)	4.748 (¼)	45	40:1	
6.758 (¼)	6.686 (¼)	6.555 (¼)	6.353 (¼)	60	30:1	
8.107 (¼)	8.022 (¼)	7.873 (¼)	7.637 (¼)	72	25:1	
10.130 (¼)	10.027 (¼)	9.849 (¼)	9.563 (¼)	90	20:1	
13.503 (¼)	13.369 (¼)	13.14 (¼)	12.77 (½)	120	15:1	
20.248 (¼)	20.052 (¼)	19.73 (¼)	19.19 (½)	180	10:1	
26.993 (¼)	26.735 (¼)	26.32 (½)	25.62 (½)	240	7.5:1	
40.483 (¼)	40.101 (½)	39.49 (½)	38.46 (½)	360	5:1	
53.97 (½)	53.47 (½)	52.66 (½)	51.30 (1)	480	7.5:1	3600
80.95 (½)	80.20 (½)	79.01 (½)	76.98 (1.5)	720	5:1	

( ) 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	60:1	1500
12.81 (0.18)	12.60 (0.18)	12.34 (0.18)	11.91 (0.37)	30	50:1	
16.00 (0.18)	15.82 (0.18)	15.48 (0.18)	14.98 (0.37)	37.5	40:1	
21.32 (0.18)	21.09 (0.18)	20.68 (0.18)	20.04 (0.37)	50	30:1	
25.57 (0.18)	25.31 (0.18)	24.83 (0.18)	24.09 (0.37)	60	25:1	
31.96 (0.18)	31.63 (0.18)	31.07 (0.18)	30.17 (0.37)	75	20:1	
42.59 (0.18)	42.17 (0.18)	41.46 (0.18)	40.29 (0.37)	100	15:1	
63.87 (0.18)	63.25 (0.18)	62.23 (0.25)	60.55 (0.55)	150	10:1	
85.15 (0.18)	84.34 (0.18)	83.01 (0.25)	80.80 (0.55)	200	7.5:1	
127.7 (0.18)	126.5 (0.18)	124.6 (0.37)	121.3 (0.75)	300	5:1	
170.3 (0.18)	168.7 (0.37)	166.1 (0.55)	161.8 (0.75)	400	7.5:1	3000
255.4 (0.18)	253.0 (0.55)	249.2 (0.55)	242.8 (0.75)	600	5:1	

( ) Required Motor kW

Performance - Flow Capacities and Pressure Ratings

For Synchronous Speed, Self-cooled Motors
L/hr Maximum Flow at Designated Pressure

L/hr All Pumps 2 Bar	17 Bar	L/hr Metallic Pump Heads Only 34 Bar	69 Bar	Pump RPM	Gear Ratio	Motor RPM
10.6	10.5	10.2	9.9	25	60:1	1500
12.8	12.6	12.3	11.9	30	50:1	
16.0	15.8	15.5	15.0	37.5	40:1	
21.3	21.1	20.7	20.0	50	30:1	
25.5	25.3	24.8	24.1	60	25:1	
32.0	31.6	31.1	30.2	75	20:1	
42.6	42.2	41.5	40.3	100	15:1	
63.9	63.3	62.2	60.5	150	10:1	
85.1	84.3	83.0	80.8	200	7.5:1	3000
127.7	126.5	124.6	121.3	300	5:1	
170.3	168.7	166.1	161.8	400	7.5:1	
255.4	253.0	249.2	242.8	600	5:1	

Required Motor kW

0.18	0.25	0.37

Notes:
a. The motor kW are based on ambient temperature conditions up to 40°C. For ambient temperatures above 40°C, please contact Wanner International.
b. Contact factory for performance specifications.
c. Based on using IEc motors.
d. Maximum continuous motor speed is 1800 rpm at full pressure.
e. For intermittent or reduced pressure duties, please contact Wanner International.

For 10:1 Turndown, Self-cooled Motors
L/hr Maximum Flow at Designated Pressure

L/hr All Pumps 2 Bar	17 Bar	L/hr Metallic Pump Heads Only 34 Bar	69 Bar	Pump RPM	Gear Ratio	Motor RPM
10.6	10.5	10.2	9.9	25	60:1	1500
12.8	12.6	12.3	11.9	30	50:1	
16.0	15.8	15.5	15.0	37.5	40:1	
21.3	21.1	20.7	20.0	50	30:1	
25.5	25.3	24.8	24.1	60	25:1	
32.0	31.6	31.1	30.2	75	20:1	
42.6	42.2	41.5	40.3	100	15:1	
63.9	63.3	62.2	60.5	150	10:1	
85.1	84.3	83.0	80.8	200	7.5:1	3000
127.7	126.5	124.6	121.3	300	5:1	
170.3	168.7	166.1	161.8	400	7.5:1	
255.4	253.0	249.2	242.8	600	5:1	

Required Motor kW

0.18	0.25	0.37	0.55	0.75	1.5

Notes:
a. The motor kW are based on ambient temperature conditions up to 25°C. For ambient temperatures above 25°C, Force-cooled Motors may be required. Please contact Wanner International.
b. Contact factory for performance specifications.
c. Based on using IEc motors.
d. Maximum continuous motor speed is 1800 rpm at full pressure.
e. For intermittent or reduced pressure duties, please contact Wanner International.

See Page 6 for Electronic Flow Rate Controller.

Mechanical Adjustment Controller for ATEX/Explosive Areas
All Min/Max flow rates in litres/hour

7 bar		17 bar		34 bar		69 bar		Pump rpm	Gearbox Ratio	Model Number	Required Motor Size & Frame
Min	Max	Min	Max	Min	Max	Min	Max				
2.0	10.2	1.9	10.0	1.9	9.8	1.6	9.4	5 - 24	25:1	80C3 - 7181K	0.25kW / IEC 71 / 4 Pole
	12.8		12.6		12.3		11.8	5 - 30	20:1		
	17.1		16.9		16.5		16.0	5 - 40	15:1		
	25.6		25.3		24.8		24.1	5 - 60	10:1		
	34.1		33.7		33.1		32.2	5 - 80	7.5:1		
	51.1		50.6		49.8		48.4	5 - 120	5:1		0.37kW / IEC 71 / 4 Pole
	68.1		67.5		66.4		64.6	5 - 160	7.5:1		0.55kW / IEC 71 / 2 Pole
	102.2		101.2		99.6		97.0	5 - 240	5:1	80E5 - 8081K	0.75kW / IEC 80 / 2 Pole