



HYDRA-CELL KALVOPUMPUT P400

Annostelupumppu

P400MSGSSB10S

Kalvopumppu P400

- Virtaus 3 - 900 l/h
- Paine max. 103 bar
- Muovi- ja metallirakenne
- Tiivisteetön rakenne



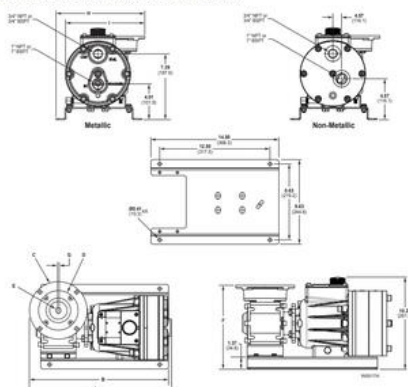
HYDRA-CELL®
SEAL-LESS PUMP TECHNOLOGIES



TUOTEKUVAUS

Hydra-Cell Metering Solutions P500 -pumpeissa käytetään kolmea kalvoa yhdessä pumppupäässä. Tämän ainutlaatuisen rakenteen ansiosta Hydra-Cell tuottaa käytännössä "pulssittoman" virtauksen ilman että, on tarvetta käyttää kalliita pulsaationvaimentimia.

P400 Models: Metallic and Non-Metallic

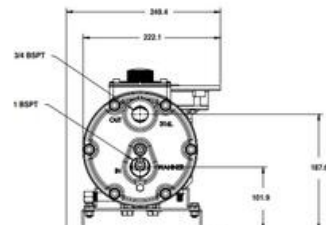
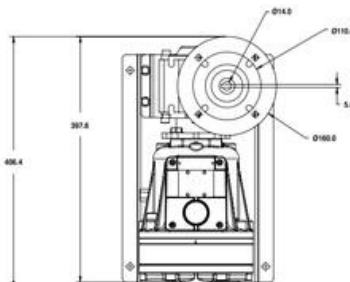


Dimensions in Inches (Millimeters)

Model	A	B	C	D	E	F	G	H	I
NEDEX 1500	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEDEX 1500 TC	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEC 1500	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEC 1500 TC	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEC 1500 TC	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEC 1500 TC	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEC 1500 TC	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEC 1500 TC	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)
NEC 1500 TC	16.13 (409.5)	17.25 (438.1)	10.71 (271.9)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)	4.00 (101.6)

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 All Pumps 1 Bar	L/hr All Pumps 1.5 Bar	L/hr All Pumps 2 Bar	L/hr All Pumps 3 Bar	L/hr All Pumps 4 Bar	L/hr All Pumps 5 Bar	L/hr All Pumps 6 Bar	L/hr All Pumps 7 Bar	L/hr All Pumps 8 Bar	L/hr All Pumps 9 Bar	L/hr All Pumps 10 Bar	L/hr All Pumps 11 Bar	L/hr All Pumps 12 Bar	L/hr All Pumps 13 Bar	L/hr All Pumps 14 Bar	L/hr All Pumps 15 Bar	L/hr All Pumps 16 Bar	L/hr All Pumps 17 Bar	L/hr All Pumps 18 Bar	L/hr All Pumps 19 Bar	L/hr All Pumps 20 Bar
30.0	25.0	20.0	15.0	10.0	5.0	2.0	1.0	0.5	0.2	0.1	0.05	0.02	0.01	0.005	0.002	0.001	0.0005	0.0002	0.0001	0.00005

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

L/hr All Pumps 1 Bar	L/hr All Pumps 1.5 Bar	L/hr All Pumps 2 Bar	L/hr All Pumps 3 Bar	L/hr All Pumps 4 Bar	L/hr All Pumps 5 Bar	L/hr All Pumps 6 Bar	L/hr All Pumps 7 Bar	L/hr All Pumps 8 Bar	L/hr All Pumps 9 Bar	L/hr All Pumps 10 Bar	L/hr All Pumps 11 Bar	L/hr All Pumps 12 Bar	L/hr All Pumps 13 Bar	L/hr All Pumps 14 Bar	L/hr All Pumps 15 Bar	L/hr All Pumps 16 Bar	L/hr All Pumps 17 Bar	L/hr All Pumps 18 Bar	L/hr All Pumps 19 Bar	L/hr All Pumps 20 Bar
30.0	25.0	20.0	15.0	10.0	5.0	2.0	1.0	0.5	0.2	0.1	0.05	0.02	0.01	0.005	0.002	0.001	0.0005	0.0002	0.0001	0.00005

Notes

- The motor kW and based on ambient temperature conditions up to 40°C. For ambient temperatures above 40°C, please contact Wanner International.
- Capacity data is shown for pumps with standard diaphragms. Contact factory for performance characteristics of pumps with PTFE diaphragms.
- Contact factory for performance specifications.
- Based on using the motor.
- Maximum continuous motor speed is 1500 rpm at full pressure.
- For intermittent or reduced pressure duties, please contact Wanner International.

Mechanical Adjustment Controller for ATEX/Explosive Areas

All Min/Max flow rates in litres/hour

2 bar	1.5 bar	1 bar	0.5 bar	0.2 bar	0.1 bar	0.05 bar	0.02 bar	0.01 bar	0.005 bar	0.002 bar	0.001 bar	0.0005 bar	0.0002 bar	0.0001 bar	0.00005 bar	0.00002 bar	0.00001 bar	0.000005 bar	0.000002 bar	0.000001 bar
30.0	25.0	20.0	15.0	10.0	5.0	2.0	1.0	0.5	0.2	0.1	0.05	0.02	0.01	0.005	0.002	0.001	0.0005	0.0002	0.0001	0.00005

P400 Specifications (Cont'd)

Performance Maximum Flow at Designated Pressure - Imperial *

All Pumps (gph)		Metric Pump Heads Only (m³/h)		Pump rpm	Gear Ratio	Motor rpm
150 psi	200 psi	250 psi	300 psi			
8,442 (302)	5,195 (202)	6,497 (252)	4,494 (172)	30	40:1	
11,432 (428)	7,281 (276)	10,492 (392)	6,288 (232)	30	40:1	
14,422 (528)	9,467 (348)	13,482 (492)	8,082 (292)	40	40:1	
17,412 (628)	11,652 (428)	15,667 (568)	9,877 (358)	40	40:1	
20,402 (728)	13,837 (498)	17,852 (648)	11,672 (428)	40	40:1	
23,392 (828)	16,022 (568)	19,842 (718)	13,467 (498)	40	40:1	
26,382 (928)	18,207 (638)	21,832 (788)	15,262 (568)	40	40:1	
29,372 (1,028)	20,392 (708)	23,822 (858)	17,057 (638)	40	40:1	
32,362 (1,128)	22,577 (778)	25,812 (928)	18,852 (708)	40	40:1	
35,352 (1,228)	24,762 (848)	27,802 (998)	20,647 (778)	40	40:1	
38,342 (1,328)	26,947 (918)	29,792 (1,068)	22,442 (848)	40	40:1	
41,332 (1,428)	29,132 (988)	31,782 (1,138)	24,237 (918)	40	40:1	
44,322 (1,528)	31,317 (1,058)	33,772 (1,208)	26,032 (988)	40	40:1	
47,312 (1,628)	33,502 (1,128)	35,762 (1,278)	27,827 (1,058)	40	40:1	
50,302 (1,728)	35,687 (1,198)	37,752 (1,348)	29,622 (1,128)	40	40:1	
53,292 (1,828)	37,872 (1,268)	39,742 (1,418)	31,417 (1,198)	40	40:1	
56,282 (1,928)	40,057 (1,338)	41,732 (1,488)	33,212 (1,268)	40	40:1	
59,272 (2,028)	42,242 (1,408)	43,722 (1,558)	35,007 (1,338)	40	40:1	
62,262 (2,128)	44,427 (1,478)	45,712 (1,628)	36,802 (1,408)	40	40:1	
65,252 (2,228)	46,612 (1,548)	47,702 (1,698)	38,597 (1,478)	40	40:1	
68,242 (2,328)	48,797 (1,618)	49,692 (1,768)	40,392 (1,548)	40	40:1	
71,232 (2,428)	50,982 (1,688)	51,682 (1,838)	42,187 (1,618)	40	40:1	
74,222 (2,528)	53,167 (1,758)	53,672 (1,908)	43,982 (1,688)	40	40:1	
77,212 (2,628)	55,352 (1,828)	55,662 (1,978)	45,777 (1,758)	40	40:1	
80,202 (2,728)	57,537 (1,898)	57,652 (2,048)	47,572 (1,828)	40	40:1	
83,192 (2,828)	59,722 (1,968)	59,642 (2,118)	49,367 (1,898)	40	40:1	
86,182 (2,928)	61,907 (2,038)	61,632 (2,188)	51,162 (1,968)	40	40:1	
89,172 (3,028)	64,092 (2,108)	63,622 (2,258)	52,957 (2,038)	40	40:1	
92,162 (3,128)	66,277 (2,178)	65,612 (2,328)	54,752 (2,108)	40	40:1	
95,152 (3,228)	68,462 (2,248)	67,602 (2,398)	56,547 (2,178)	40	40:1	
98,142 (3,328)	70,647 (2,318)	69,592 (2,468)	58,342 (2,248)	40	40:1	
101,132 (3,428)	72,832 (2,388)	71,582 (2,538)	60,137 (2,318)	40	40:1	
104,122 (3,528)	75,017 (2,458)	73,572 (2,608)	61,932 (2,388)	40	40:1	
107,112 (3,628)	77,202 (2,528)	75,562 (2,678)	63,727 (2,458)	40	40:1	
110,102 (3,728)	79,387 (2,598)	77,552 (2,748)	65,522 (2,528)	40	40:1	
113,092 (3,828)	81,572 (2,668)	79,542 (2,818)	67,317 (2,598)	40	40:1	
116,082 (3,928)	83,757 (2,738)	81,532 (2,888)	69,112 (2,668)	40	40:1	
119,072 (4,028)	85,942 (2,808)	83,522 (2,958)	70,907 (2,738)	40	40:1	
122,062 (4,128)	88,127 (2,878)	85,512 (3,028)	72,702 (2,808)	40	40:1	
125,052 (4,228)	90,312 (2,948)	87,502 (3,098)	74,497 (2,878)	40	40:1	
128,042 (4,328)	92,497 (3,018)	89,492 (3,168)	76,292 (2,948)	40	40:1	
131,032 (4,428)	94,682 (3,088)	91,482 (3,238)	78,087 (3,018)	40	40:1	
134,022 (4,528)	96,867 (3,158)	93,472 (3,308)	79,882 (3,088)	40	40:1	
137,012 (4,628)	99,052 (3,228)	95,462 (3,378)	81,677 (3,158)	40	40:1	
140,002 (4,728)	101,237 (3,298)	97,452 (3,448)	83,472 (3,228)	40	40:1	
143,992 (4,828)	103,422 (3,368)	99,442 (3,518)	85,267 (3,298)	40	40:1	
146,982 (4,928)	105,607 (3,438)	101,432 (3,588)	87,062 (3,368)	40	40:1	
149,972 (5,028)	107,792 (3,508)	103,422 (3,658)	88,857 (3,438)	40	40:1	
152,962 (5,128)	109,977 (3,578)	105,412 (3,728)	90,652 (3,508)	40	40:1	
155,952 (5,228)	112,162 (3,648)	107,402 (3,798)	92,447 (3,578)	40	40:1	
158,942 (5,328)	114,347 (3,718)	109,392 (3,868)	94,242 (3,648)	40	40:1	
161,932 (5,428)	116,532 (3,788)	111,382 (3,938)	96,037 (3,718)	40	40:1	
164,922 (5,528)	118,717 (3,858)	113,372 (4,008)	97,832 (3,788)	40	40:1	
167,912 (5,628)	120,902 (3,928)	115,362 (4,078)	99,627 (3,858)	40	40:1	
170,902 (5,728)	123,087 (3,998)	117,352 (4,148)	101,422 (3,928)	40	40:1	
173,892 (5,828)	125,272 (4,068)	119,342 (4,218)	103,217 (3,998)	40	40:1	
176,882 (5,928)	127,457 (4,138)	121,332 (4,288)	105,012 (4,068)	40	40:1	
179,872 (6,028)	129,642 (4,208)	123,322 (4,358)	106,807 (4,138)	40	40:1	
182,862 (6,128)	131,827 (4,278)	125,312 (4,428)	108,602 (4,208)	40	40:1	
185,852 (6,228)	134,012 (4,348)	127,302 (4,498)	110,397 (4,278)	40	40:1	
188,842 (6,328)	136,197 (4,418)	129,292 (4,568)	112,192 (4,348)	40	40:1	
191,832 (6,428)	138,382 (4,488)	131,282 (4,638)	113,987 (4,418)	40	40:1	
194,822 (6,528)	140,567 (4,558)	133,272 (4,708)	115,782 (4,488)	40	40:1	
197,812 (6,628)	142,752 (4,628)	135,262 (4,778)	117,577 (4,558)	40	40:1	
200,802 (6,728)	144,937 (4,698)	137,252 (4,848)	119,372 (4,628)	40	40:1	
203,792 (6,828)	147,122 (4,768)	139,242 (4,918)	121,167 (4,698)	40	40:1	
206,782 (6,928)	149,307 (4,838)	141,232 (5,000)	122,962 (4,768)	40	40:1	
209,772 (7,028)	151,492 (4,908)	143,222 (5,070)	124,757 (4,838)	40	40:1	
212,762 (7,128)	153,677 (4,978)	145,212 (5,140)	126,552 (4,908)	40	40:1	
215,752 (7,228)	155,862 (5,048)	147,202 (5,210)	128,347 (4,978)	40	40:1	
218,742 (7,328)	158,047 (5,118)	149,192 (5,280)	130,142 (5,048)	40	40:1	
221,732 (7,428)	160,232 (5,188)	151,182 (5,350)	131,937 (5,118)	40	40:1	
224,722 (7,528)	162,417 (5,258)	153,172 (5,420)	133,732 (5,188)	40	40:1	
227,712 (7,628)	164,602 (5,328)	155,162 (5,490)	135,527 (5,258)	40	40:1	
230,702 (7,728)	166,787 (5,398)	157,152 (5,560)	137,322 (5,328)	40	40:1	
233,692 (7,828)	168,972 (5,468)	159,142 (5,630)	139,117 (5,398)	40	40:1	
236,682 (7,928)	171,157 (5,538)	161,132 (5,700)	140,912 (5,468)	40	40:1	
239,672 (8,028)	173,342 (5,608)	163,122 (5,770)	142,707 (5,538)	40	40:1	
242,662 (8,128)	175,527 (5,678)	165,112 (5,840)	144,502 (5,608)	40	40:1	
245,652 (8,228)	177,712 (5,748)	167,102 (5,910)	146,297 (5,678)	40	40:1	
248,642 (8,328)	179,897 (5,818)	169,092 (5,980)	148,092 (5,748)	40	40:1	
251,632 (8,428)	182,082 (5,888)	171,082 (6,050)	149,887 (5,818)	40	40:1	
254,622 (8,528)	184,267 (5,958)	173,072 (6,120)	151,682 (5,888)	40	40:1	
257,612 (8,628)	186,452 (6,028)	175,062 (6,190)	153,477 (5,958)	40	40:1	
260,602 (8,728)	188,637 (6,098)	177,052 (6,260)	155,272 (6,028)	40	40:1	
263,592 (8,828)	190,822 (6,168)	179,042 (6,330)	157,067 (6,098)	40	40:1	
266,582 (8,928)	193,007 (6,238)	181,032 (6,400)	158,862 (6,168)	40	40:1	
269,572 (9,028)	195,192 (6,308)	183,022 (6,470)	160,657 (6,238)	40	40:1	
272,562 (9,128)	197,377 (6,378)	185,012 (6,540)	162,452 (6,308)	40	40:1	
275,552 (9,228)	199,562 (6,448)	187,002 (6,610)	164,247 (6,378)	40	40:1	
278,542 (9,328)	201,747 (6,518)	188,992 (6,680)	166,042 (6,448)	40	40:1	
281,532 (9,428)	203,932 (6,588)	190,982 (6,750)	167,837 (6,518)	40	40:1	
284,522 (9,528)	206,117 (6,658)	192,972 (6,820)	169,632 (6,588)	40	40:1	
287,512 (9,628)	208,302 (6,728)	194,962 (6,890)	171,427 (6,658)	40	40:1	
290,502 (9,728)	210,487 (6,798)	196,952 (6,960)	173,222 (6,728)	40	40:1	
293,492 (9,828)	212,672 (6,868)	198,942 (7,030)	175,017 (6,798)	40	40:1	
296,482 (9,928)	214,857 (6,938)	200,932 (7,100)	176,812 (6,868)	40	40:1	
299,472 (10,028)	217,042 (7,008)	202,922 (7,170)	178,607 (6,938)	40	40:1	
302,462 (10,128)	219,227 (7,078)	204,912 (7,240)	180,402 (7,008)	40	40:1	
305,452 (10,228)	221,412 (7,148)	206,902 (7,310)	182,197 (7,078)	40	40:1	
308,442 (10,328)	223,597 (7,218)	208,892 (7,380)	183,992 (7,148)	40	40:1	
311,432 (10,428)	225,782 (7,288)	210,882 (7,450)	185,787 (7,218)	40	40:1	
314,422 (10,528)	227,967 (7,358)	212,872 (7,520)	187,582 (7,288)	40	40:1	
317,412 (10,628)	230,152 (7,428)	214,862 (7,590)	189,377 (7,358)	40	40:1	
320,402 (10,728)	232,337 (7,498)	216,852 (7,660)	191,172 (7,428)	40	40:1	
323,392 (10,828)	234,522 (7,568)	218,842 (7,730)	192,967 (7,498)	40	40:1	
326,382 (10,928)	236,707 (7,638)	220,832 (7,800)	194,762 (7,568)	40	40:1	
329,372 (11,028)	238,892 (7,708)	222,822 (7,870)	196,557 (7,638)	40	40:1	
332,362 (11,128)	241,077 (7,778)	224,812 (7,940)	198,352 (7,708)	40	40:1	
335,352 (11,228)	243,262 (7,848)	226,802 (8,010)	200,147 (7,778)	40	40:1	
338,342 (11,328)	245,447 (7,918)	228,792 (8,080)	201,942 (7,848)	40	40:1	
341,332 (11,428)	247,632 (7,988)	230,782 (8,150)	203,737 (7,918)	40	40:1	
344,322 (11,528)	249,817 (8,058)	232,772 (8,220)	205,532 (7,988)	40	40:1	
347,312 (11,628)	252,002 (8,128)	234,762 (8,290)	207,327 (8,058)	40	40:1	
350,302 (11,728)	254,187 (8,198)	236,752 (8,360)	209,122 (8,128)	40	40:1	
353,292 (11,828)	256,372 (8,268)	238,742 (8,430)	210,917 (8,198)	40	40:1	
356,282 (11,928)	258,557 (8,338)	240,732 (8,500)	212,712 (8,268)	40	40:1	
359,272 (12,028)	260,742 (8,408)	242,722 (8,570)	214,507 (8,338)	40	40:1	
362,262 (12,128)	262,927 (8,478)	244,712 (8,640)	216,302 (8,408)	40	40:1	
365,252 (12,228)	265,112 (8,548)	246,702 (8,710)	218,097 (8,478)	40	40:1	
368,242 (12,328)	267,297 (8,618)	248,692 (8,780)	219,892 (8,548)	40	40:1	
371,232 (12,428)	269,482 (8,688)	250,682 (8,850)	221,687 (8,618)	40	40:1	
374,222 (12,528)	271,667 (8,758)	252,672 (8,920)	223,482 (8,688)	40	40:1	
377,212 (12,628)	273,852 (8,828)	254,662 (9,000)	225,277 (8,758)	40	40:1	
380,202 (12,728)	276,037 (8,898)	256,652 (9,070)	227,072 (8,828)	40	40:1	
383,192 (12,828)	278,222 (8,968)	258,642 (9,140)	228,867 (8,898)	40	40:1	
386,182 (12,928)	280,407 (9,038)	260,632 (9,210)	230,662 (8,968)	40	40:1	
389,172 (13,028)	282,592 (9,108)	262,622 (9,280)	232,457 (9,038)	40	40:1	
392,162 (13,128)	284,777 (9,178)	26				