

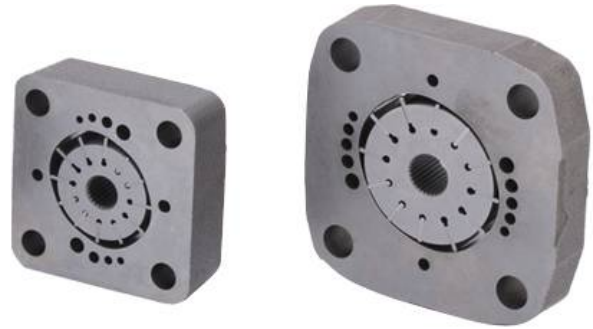
# Cartridge Kit for Vane Pump



## HV Series

### Features

- Replacements for single and double HV10, HV10F, HV10P, HV20, HV20F, HV20P, HV2010, HV2010F, HV2010P, HV2020, HV2020F, HV2020P, HV210, and HV230. It is the cartridge consists of a cam ring, a rotor, and 12 vanes.
- To change rotation, flip the cam ring so that the arrow point to the other direction.  
No need to do anything with the vanes.



## Ordering Code

HV20F - 11 - P2

1

2

3

**1** Model Series

HV10, HV20, HV10F, HV10P, HV20F, HV20P, HV210, HV230  
HV2010, HV2020, HV2010F, HV2010P, HV2020F, HV2020P

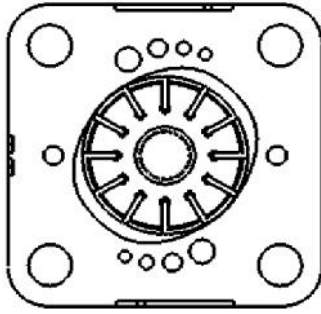
**2** Delivery (USgpm at 1200 rpm)

HV10, HV10F, HV10P, HV2010, HV2010F, HV2010P - 1, 2, 3, 4, 5, 6, 7  
HV20, HV20F, HV20P, HV2010, HV2010F, HV2010P, - 5, 6, 7, 8, 9, 10, 11, 12, 13  
HV2020, HV2020F, HV2020P

**3** Cartridge Position

P1 - For single pump or shaft end in double pump  
P2 - For cover end in double pump

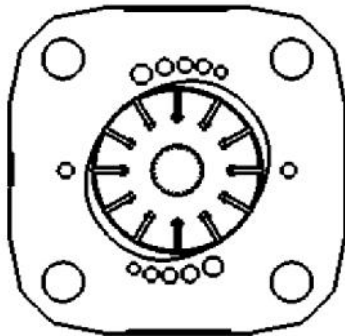
### Cartridge Kit HV10 Installation Dimensions mm(inch)



Delivery	A
1,2,3	15.6(0.61)
4,5	21.9(0.86)
6,7	26.9(1.06)

Model Series	Ring Size Delivery at 1200 r/min & 7 bar (100psi) USgpm	Geometric Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	Delivery at 1500 r/min & 7 bar (100psi) L/min (USgpm)	Maximum Pressure bar (psi)	Maximum Speed rpm	Minimum Speed rpm	Weight kg (lb)
HV10	1	3.3 (0.20)	4.70 (1.25)	172 (2500)	4800	650	0.6 (1.3)
	2	6.6 (0.40)	9.40 (2.50)	172 (2500)	4500	650	0.6 (1.3)
	3	9.8 (0.60)	14.20 (3.75)	172 (2500)	4000	650	0.6 (1.3)
	4	13.1 (0.80)	18.90 (5.00)	172 (2500)	3400	650	0.8 (1.7)
	5	16.4 (1.00)	23.60 (6.25)	172 (2500)	3200	650	0.8 (1.7)
	6	19.5 (1.19)	28.40 (7.50)	152 (2200)	3000	650	1.0 (2.2)
	7	22.8 (1.39)	33.10 (8.75)	138 (2000)	2800	650	1.0 (2.2)

### Cartridge Kit HV20 Installation Dimensions mm(inch)



Delivery	A
5,6	15.5(0.61)
7,8,9	21.9(0.86)
10,11	26.9(1.06)
12,13	30.4(1.19)

Model Series	Ring Size Delivery at 1200 r/min & 7 bar (100psi) USgpm	Geometric Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	Delivery at 1500 r/min & 7 bar (100psi) L/min (USgpm)	Maximum Pressure bar (psi)	Maximum Speed rpm	Minimum Speed rpm	Weight kg (lb)
HV20	5	16.4 (1.00)	23.60 (6.25)	172 (2500)	3400	650	1.1 (2.4)
	6	19.5 (1.19)	28.39 (7.50)	172 (2500)	3400	650	1.1 (2.4)
	7	22.8 (1.39)	33.11 (8.75)	172 (2500)	3000	650	1.6 (3.5)
	8	26.5 (1.62)	37.85 (10.00)	172 (2500)	2800	650	1.6 (3.5)
	9	29.7 (1.81)	42.57 (11.25)	172 (2500)	2800	650	1.6 (3.5)
	10	34.1 (2.08)	47.30 (12.51)	172 (2500)	2500	650	2.1 (4.6)
	11	36.4 (2.22)	52.04 (13.75)	172 (2500)	2500	650	2.1 (4.6)
	12	39.0 (2.38)	56.77 (15.00)	152 (2200)	2400	650	2.3 (5.0)
13	42.4 (2.59)	61.50 (16.25)	152 (2200)	2400	650	2.3 (5.0)	