High Performance Single Vane Pump 45 HV/HVQ Series

Specifications :

45 HV Series

Model	Delivery at 1200 r/min & 7 bar (100 psi) USgpm	Displacement cm³/r (in³/r)	Maximum Speed rpm	Maximum Pressure bar (psi)	Typical Delivery at max speed & pressure L/min (USgpm)	Typical Input Power at max speed & pressure kW (hp)	Weight kg (lb)
45HV	35	110.4 (6.73)	1800	172 (2500)	179.0 (47.2)	60.0 (80.4)	35.2 (77.4)
	38	119.8 (7.32)			194.0 (51.3)	65.1 (87.3)	
	42	138.0 (8.41)			208.2 (55.0)	75.3 (101.0)	
	47	151.4 (9.26)			244.1 (64.5)	82.5 (110.6)	
	50	162.0 (9.85)			253.6 (67.0)	87.3 (117.0)	
	52	164.0 (10.0)			266.0 (70.0)	89.1 (119.5)	
	57	183.6 (11.23)			295.0 (77.8)	94.0 (126.0)	
	60	193.0 (11.75)			310.4 (82.0)	103.7 (139.0)	
	62	196.0 (11.94)			317.0 (83.7)	106.5 (142.8)	
	64	202.0 (12.33)			327.0 (86.4)	109.7 (147.1)	
	66	208.0 (12.7)			337.0 (89.0)	113.0 (151.5)	

High Performance Single Vane Pump
45 HV/HVQ Series

45 HVQ Series

Model	Delivery at 1200 r/min & 7 bar (100 psi) USgpm	Displacement cm³/r (in³/r)	Maximum Speed rpm	Maximum Pressure bar (psi)	Typical Delivery at max speed & pressure L/min (USgpm)	Typical Input Power at max speed & pressure kW (hp)	Weight kg (lb)
45HVQ	35	110.4 (6.73)	2200	172 (2500)	219.0 (57.7)	73.3 (98.3)	35.2 (77.4)
	38	119.8 (7.32)			237.0 (62.7)	79.5 (106.7)	
	42	138.0 (8.41)			251.7 (66.5)	91.4 (122.5)	
	47	151.4 (9.26)			280.8 (74.2)	95.0 (127.3)	
	50	162.0 (9.85)			299.0 (79.0)	105.2 (141.0)	
	52	164.0 (10.0)			325.0 (85.7)	106.6 (143.0)	
	57	183.6 (11.23)			342.5 (90.5)	109.3 (146.6)	
	60	193.0 (11.75)			363.4 (96.0)	126.8 (170.0)	
	62	196.0 (11.94)			387.0 (102.3)	128.8 (172.7)	
	64	202.0 (12.33)			400.0 (105.7)	132.7 (178.0)	
	66	208.0 (12.7)			412.0 (109.0)	136.6 (183.2)	

High Performance Single Vane Pump
45 HV/HVQ Series

Ordering Code : Single Pump

45	HVQ	-	50	A	-	1	C	20	L
1	2		3	4		5	6	7	8

1. Model :
   - 45 - Standard Bearing SAE C 2 bolts mounting flange J744

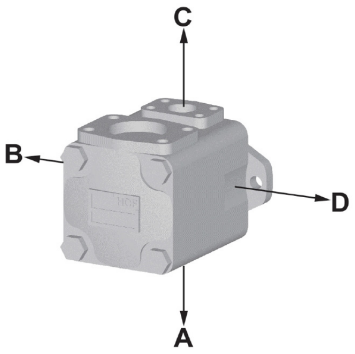
2. Series
   - HV - Industrial
   - HVQ - Mobile

3. Displacement
   Volumetric displacement cm³/rev (in³/rev)
   - 35 - 110.4 (6.73)
   - 38 - 119.8 (7.32)
   - 42 - 138.0 (8.41)
   - 47 - 151.4 (9.26)
   - 50 - 162.0 (9.85)
   - 52 - 164.0 (10.0)
   - 57 - 183.6 (11.23)
   - 60 - 193.0 (11.75)
   - 62 - 196.0 (11.94)
   - 64 - 202.0 (12.33)
   - 66 - 208.0 (12.7)

4. Port Connection (4 bolts SAE flange J518C)
   - A - UNC Port Connection
   - AM - Metric Port Connection

5. Type of shaft
   - 1 - Straight Keyed Shaft
   - 11 - Splined Shaft
   - 86 - Heavy Duty Straight Keyed Shaft

6. Outlet Port Position (Viewed from cover end)
   - A - Opposite inlet
   - B - 90° CCW from inlet
   - C - Inline with inlet
   - D - 90° CW from inlet



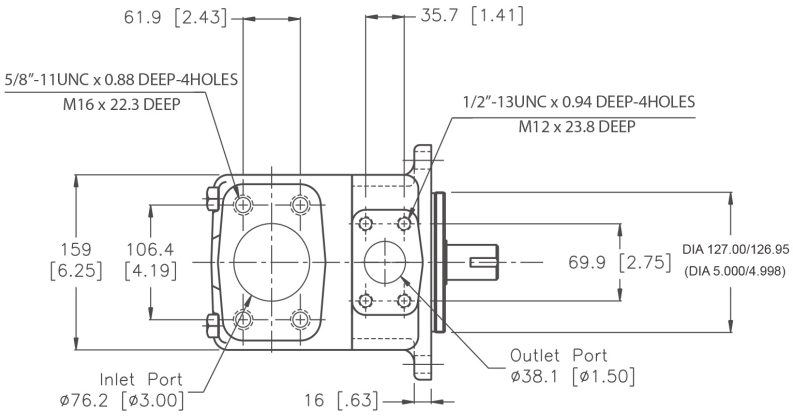
7. Design
   Subject to change. Installation dimension remain the same for designs - 20 through -29

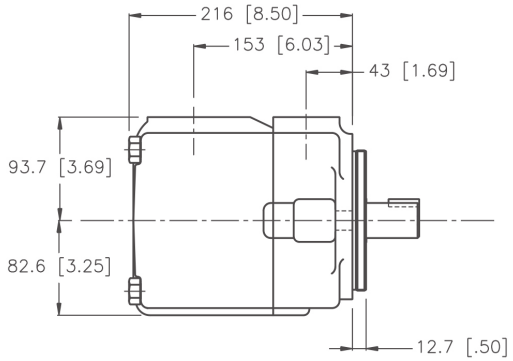
8. Shaft Rotation (viewed from shaft end)
   - R - Turn right
   - L - Turn left

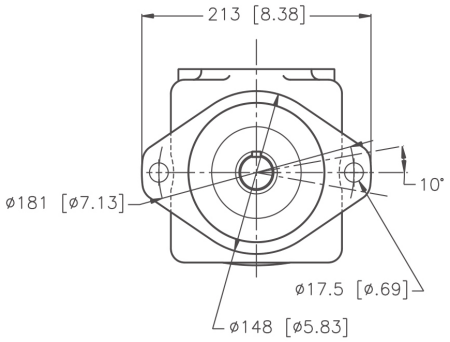
High Performance Single Vane Pump
45 HV/HVQ Series

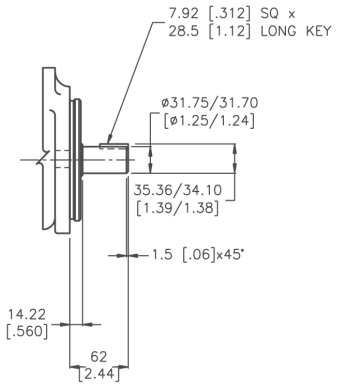
Installation Dimension mm (inch)

Single Pump 45HV/HVQ

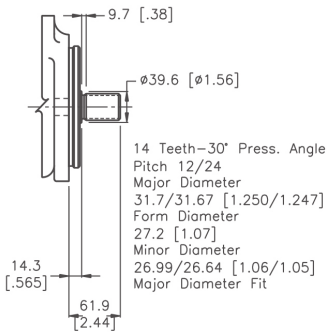




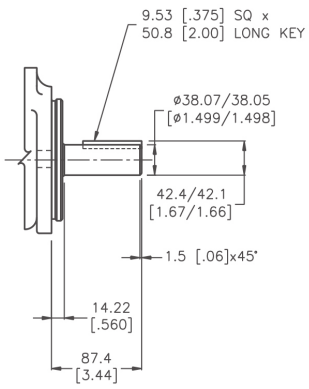




Shaft 1
Keyed Shaft



Shaft 11
Splined Shaft



Shaft 86
Heavy Duty Keyed Shaft

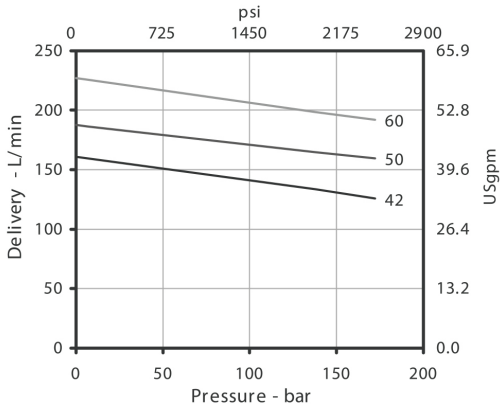
High Performance Single Vane Pump 45 HV/HVQ Series

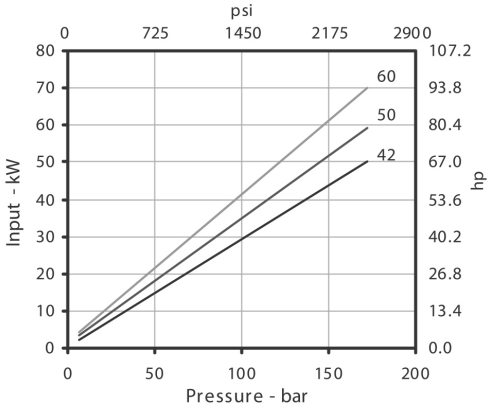
Performance Characteristics

45HV, Shaft End of 45HV

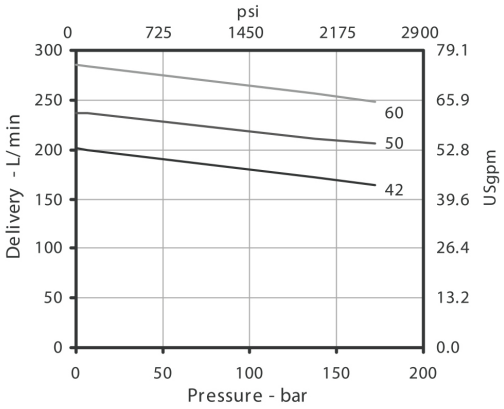
Based on SAE 10W Fluid at 50°C (120°F) and pump inlet at 0 PSIG (14.7 PSIA)

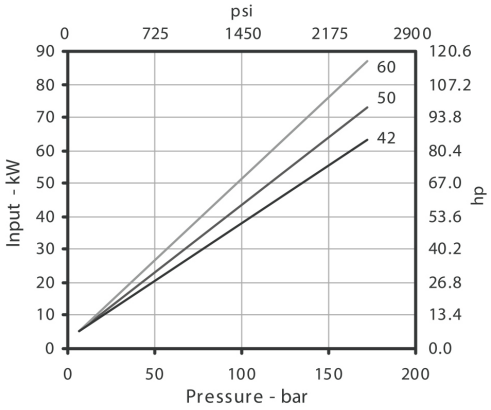
At 1200 rpm



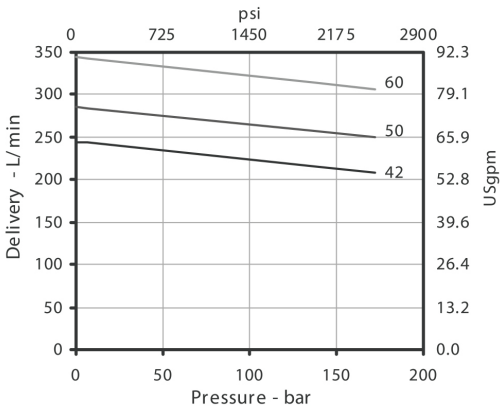


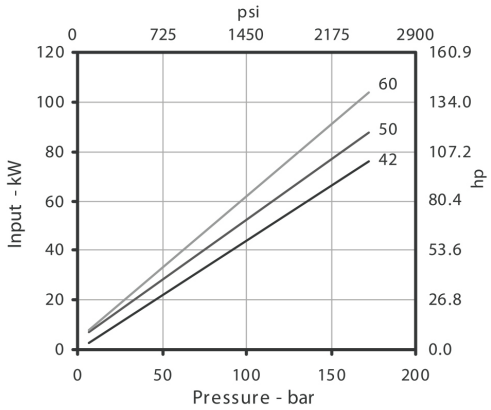
At 1500 rpm





At 1800 rpm



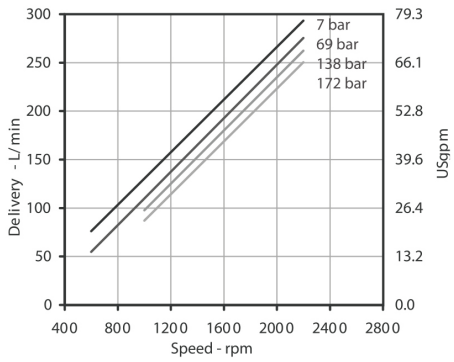


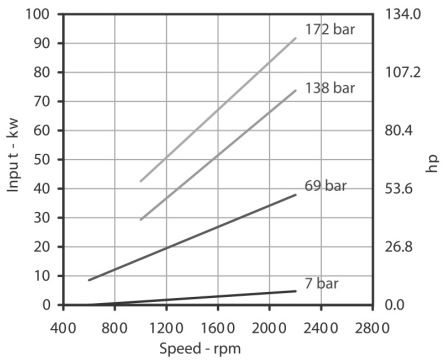
High Performance Single Vane Pump
45 HV/HVQ Series

45HVQ, Shaft End of 45HVQ

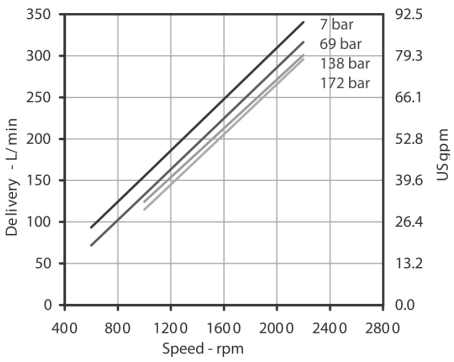
Based on SAE 10W Fluid at 50°C (120°F) and pump inlet at 0 PSIG (14.7 PSIA)

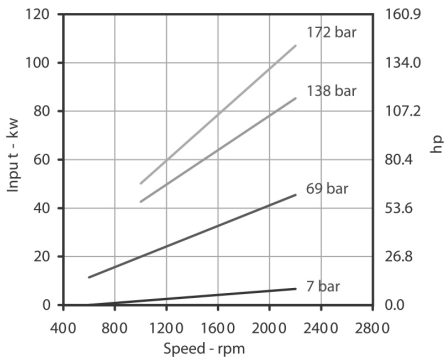
Size 42



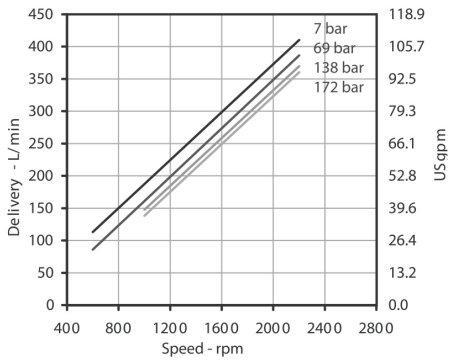


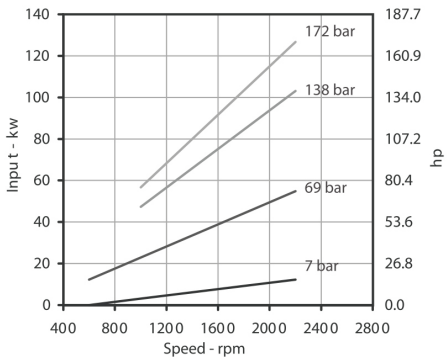
Size 50





Size 60





For the Cover End Cartridge, the speed could not exceed the maximum speed of the shaft End Cartridge