Single Vane Pump
HV20 Series

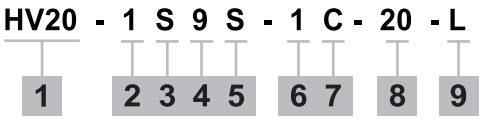
Specifications

Model	Ring Size Delivery at 1200 r/min & 7 bar (100 psi) USgpm	Geometric Displacement cm³/r (in³/r)	Delivery at 1500 r/min & 7 bar (100 psi) L/min (USgpm)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Max. Speed rpm	Min. Speed rpm	Weight kg (lb)
HV 20	5	16.4 (1.00)	23.60 (6.25)	175 (2500)	160 (2250)	3400	650	7.50 - 8.50 (16.50 - 18.70)
	6	19.5 (1.19)	28.39 (7.50)			3400		
	7	22.8 (1.39)	33.11 (8.75)			3000		
	8	26.5 (1.62)	37.85 (10.00)			2800		
	9	29.7 (1.81)	42.57 (11.25)			2800		
	10	34.1 (2.08)	47.30 (12.51)			2500		
	11	36.4 (2.22)	52.04 (13.75)			2500		
	12	39.0 (2.38)	56.77 (15.00)	150 (2200)	140 (2000)	2400		
	13	42.4 (2.59)	61.50 (16.25)			2400		

** A transient (peak) pressure 10% over the continuous pressure rating for 0.5 seconds or less duration is allowed.*

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Ordering Code : Single Pump



1. Model :
   HV20 - Standard Cover
   SAE A 2 bolts mounting flange J744
2. Mounting
   1 - Bolt Flange

3. Inlet Port Connection
   S - 1" 5/8 - 12 UN(SAE#20)
   P - 1" 1/4 NPT
   B - 1" 1/4 BSP

4. Displacement (at 1200 rpm)
   Volumetric displacement cm³/rev (in³/rev)
   5 - 16.4 (1.00)
   6 - 19.5 (1.19)
   7 - 22.8 (1.39)
   8 - 26.5 (1.62)
   9 - 29.7 (1.81)
   10 - 34.1 (2.08)
   11 - 36.4 (2.22)
   12 - 39.0 (2.38)
   13 - 42.4 (2.59)

5. Outlet Port Connection
   S - 1" 1/16 - 12 UN(SAE#12)
   P - 3/4" NPT
   B - 3/4" BSP

6. Type of shaft
   1 - Straight Keyed Shaft
   3 - Threaded with woodruff Keyed Shaft
   6 - Woodruff Keyed stub Shaft
   11 - Splined Shaft
   15 - Splined Shaft
   38 - Splined Shaft
   62 - Splined Shaft
   123 - Threaded with woodruff Keyed Shaft

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

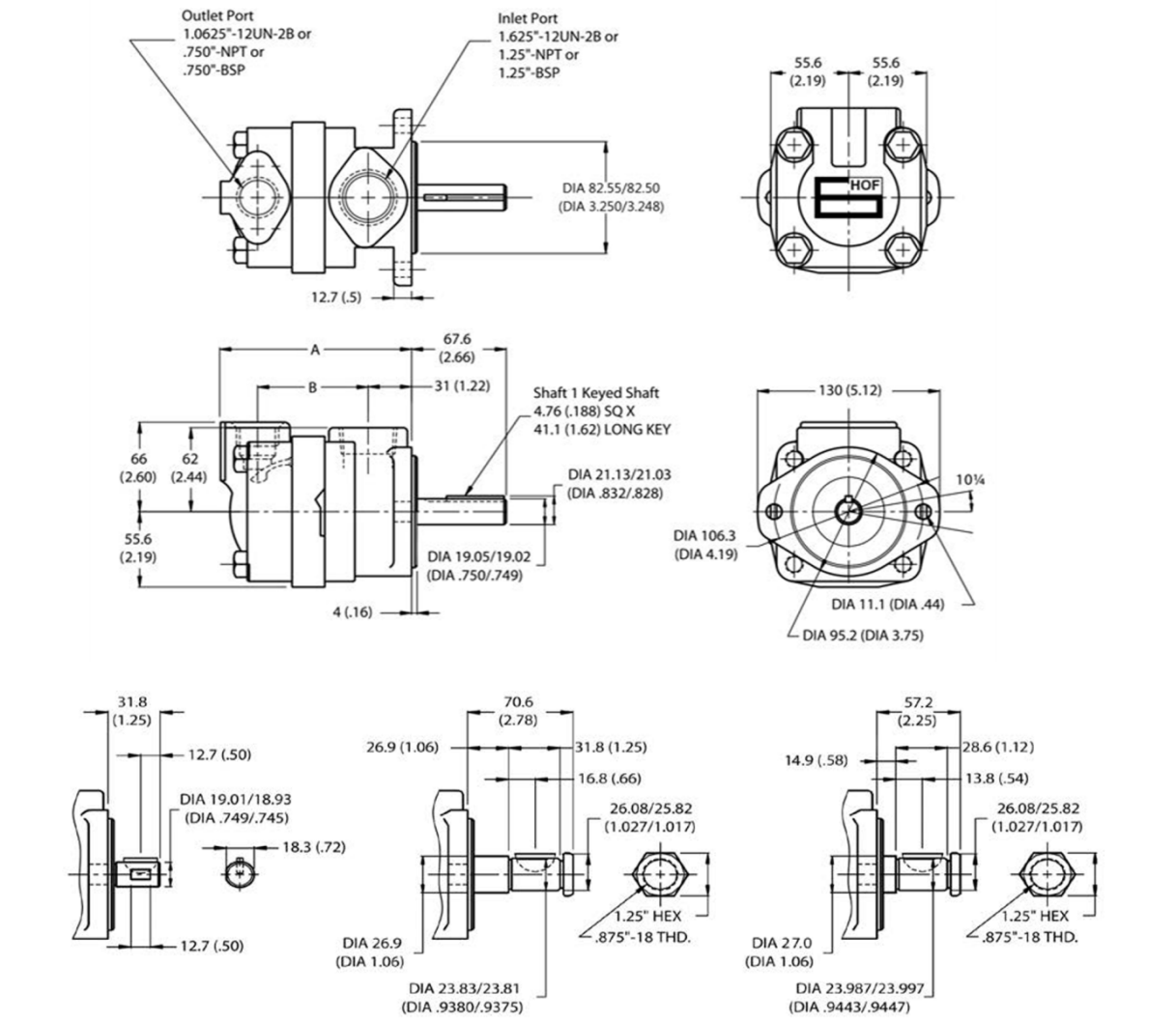
8. Design
   Subject to change. Installation dimension remain the same for designs - 20 through -29

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

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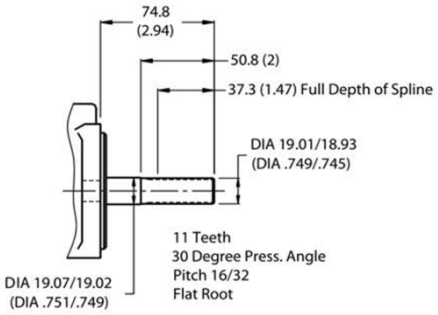
Installation Dimension mm (inch)

HV20

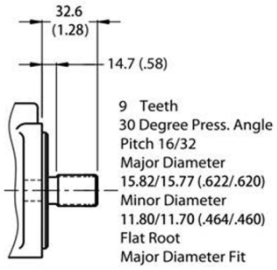


Shaft 6 Straight Stub Keyed Shaft Shaft 3 Threaded with #6 Woodruff Key Shaft 123 Threaded with #13 Woodruff Key

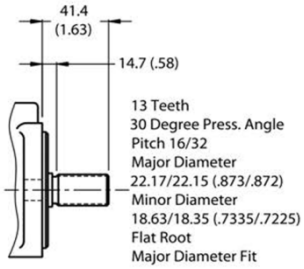
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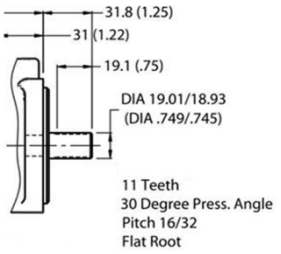
Shaft 11 Splined Shaft 11 Teeth



Shaft 62 Splined Shaft 9 Teeth



Shaft 15 Splined Shaft 13 Teeth



Shaft 38 Splined Shaft 11 Teeth

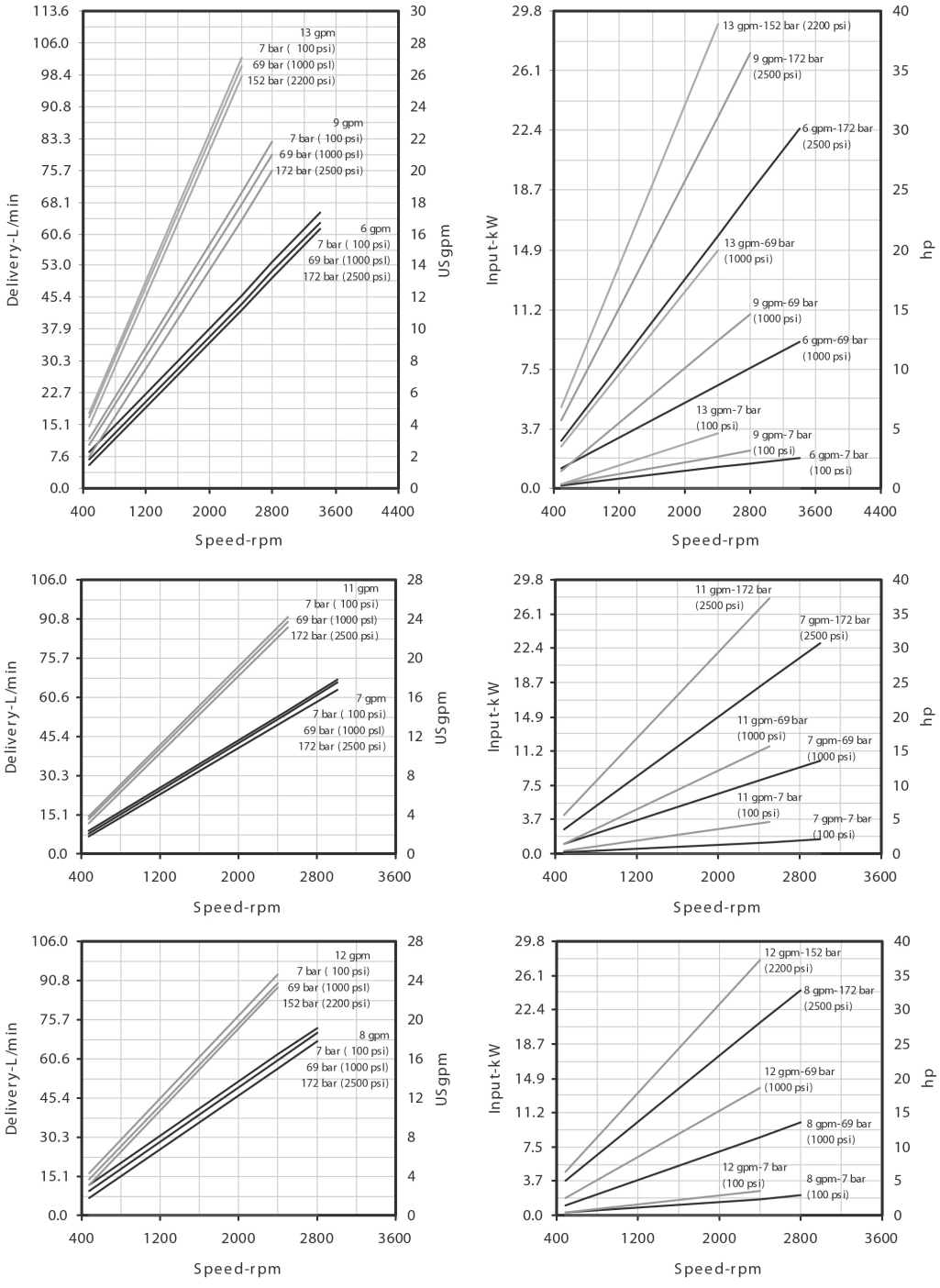
Delivery @ 1200 rpm & 7 bar (100psi)	Dimension	
	A	B
5, 6	125.2 (4.93)	71.1 (2.80)
7, 8, 9	131.6 (5.18)	77.5 (3.05)
10, 11	136.7 (5.38)	82.6 (3.25)
12, 13	140.2 (5.52)	86.1 (3.39)

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Performance Characteristics

HV20, Shaft End of HV20, Cover End of HV2020

Based on viscosity 32 cSt (150 SSU) oil at 49°C (120°F) and pump inlet at 0 PSIG (14.7 PSIA)



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