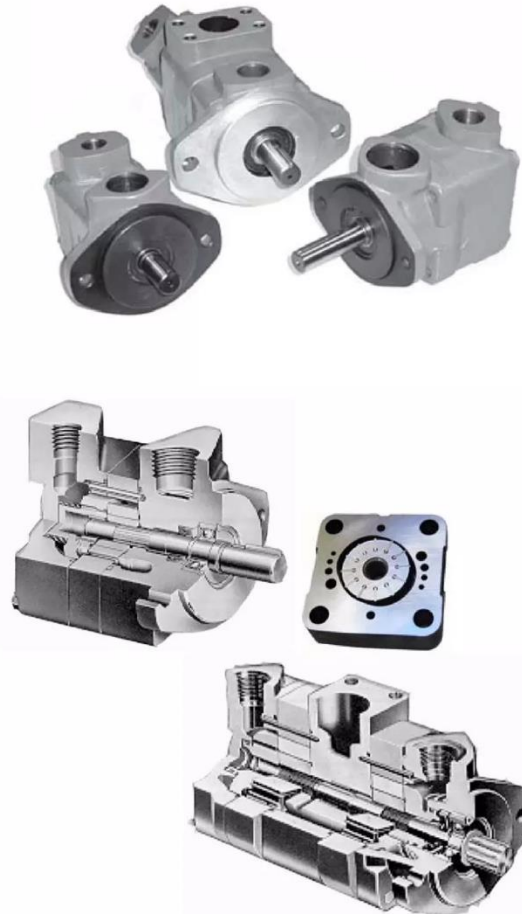


Eaton Vickers V10 and V20 Hydraulic Fixed Displacement Vane Pump

Features

- EATON Vickers 10 and V20 series are fixed displacement and balanced type hydraulic vane pumps. With compact sizes, they are available in single pumps and double pumps for both industrial and mobile application.
- The vane design with self compensation for wear and clearances makes volumetric efficiency of pump nearly constant over the service life. (the vanes always adjust its orbit to contact with the cam ring, even though wear occurs between the cam ring and vane tips)
- The hydraulic vane pump is not damaged at low speed and high pressure operation because pumping action does not start until the speed is high enough for the vane to throw out. With hydraulically balanced design, the bearing is externally loaded only. Therefore, the pump requires minimized maintenance with long service life.
- The inlet or outlet ports can be rotated through increments of 90° in relation to each other, providing application flexibility and easy installation.
- With optional flow control and priority valve covers, the pump can be used in more applications. The flow control cover can limit the flow to the primary circuit at the required flow rate, while diverts remaining flow to the tank. The priority valve cover maintains a constant flow to the primary circuit, while diverts remaining flow to the secondary circuit. Each cover comes with a relief valve to limits the maximum pressure of the primary circuit.
- Interchangeable with original Vickers hydraulic vane pumps of the same model.



Handling

- For maximum service life, the pump should be protected from contamination. Filtering fluid before filling and during operation to maintain or exceed ISO cleanliness code 17/14. Replaceable elements should be changed as filter supplier instructions
- The drive shaft must align with the power source shaft. Avoiding shaft end thrust and applications that impose radial loading.
- The start-up procedures should be as follows:
 - Check the rotation of power source to match the rotation of pump.
 - Check inlet and outlet ports to assure all connections are properly installed and check all mounting bolts and flanges to assure all are tight and properly aligned.
- Fill pump with fluid through the outlet port if the pump is mounted above the fluid level. The spline shaft models also need to be lubricated with an anti-fretting grease or similar lubricant.
- Place all controls in the neutral position so the pump is unloaded during initial start-up.
- Prime the pump within a few second when the pump is started.
- Bleed off entrapped air from outlet circuit until a steady output flow is observed.

Single Pump Operating Specifications

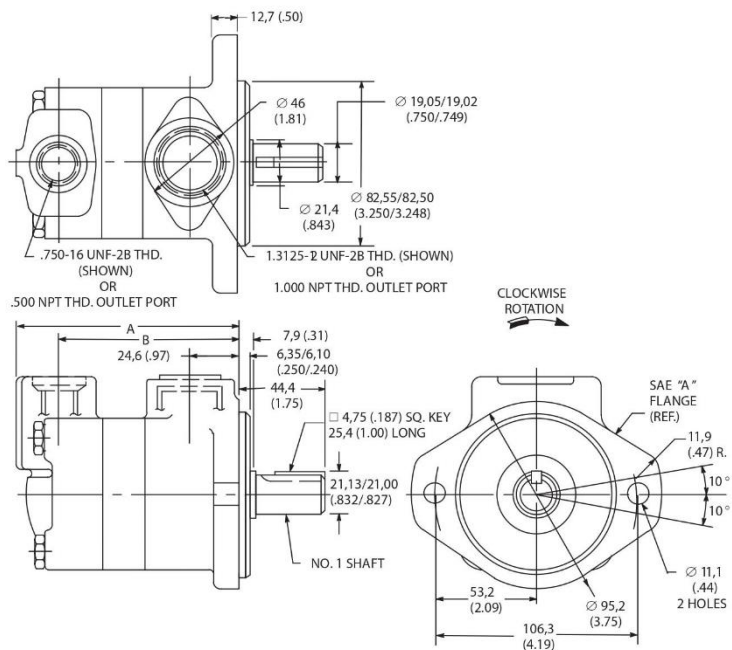
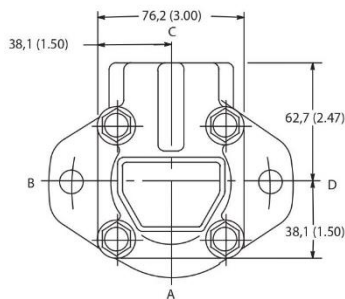
Model Series	Deliver y USgpm @ 1200 r/min 7 bar (100 psi)	Displ. cm ³ /r (in ³ /r)	Max. r/min	Max. bar (psi)	Typical del. L/min (USgpm) @ max. speed & pressure	Typical input kW (hp) @ max. speed & pressure	Wt. kg (lb.)
V10 V10F V10P	1	3,3 (.20)	4800	172 (2500)	13,6 (3.6)	5,2 (7)	4,5 - 6,8 (10 - 15)
	2	6,6 (.40)	4500	172 (2500)	27,7 (7.3)	10,1 (13.6)	
	3	9,8 (.60)	4000	172 (2500)	35,6 (9.4)	13,3 (17.8)	
	4	13,1 (.80)	3400	172 (2500)	41,3 (10.9)	15,2 (20.4)	
	5	16,4 (1.00)	3200	172 (2500)	48,5 (12.8)	17 (22.8)	
	6	19,5 (1.19)	3000	152 (2200)	55,3 (14.6)	18,3 (24.5)	
	7	22,8 (1.39)	2800	138 (2000)	60,6 (16)	17,9 (24)	

Installation Dimensions

V10 Series

Dimensions in millimeters (inches).

Delivery @ 1200 rpm & 100 psi	Dimensions	
	A	B
1 USgpm	115,6 (4.55)	91,9 (3.62)
2 USgpm	115,6 (4.55)	91,9 (3.62)
3 USgpm	115,6 (4.55)	91,9 (3.62)
4 USgpm	121,9 (4.80)	98,3 (3.87)
5 USgpm	121,9 (4.80)	98,3 (3.87)
6 USgpm	127,0 (5.00)	103,4 (4.07)
7 USgpm	127,0 (5.00)	103,4 (4.07)



PB Eaton V10

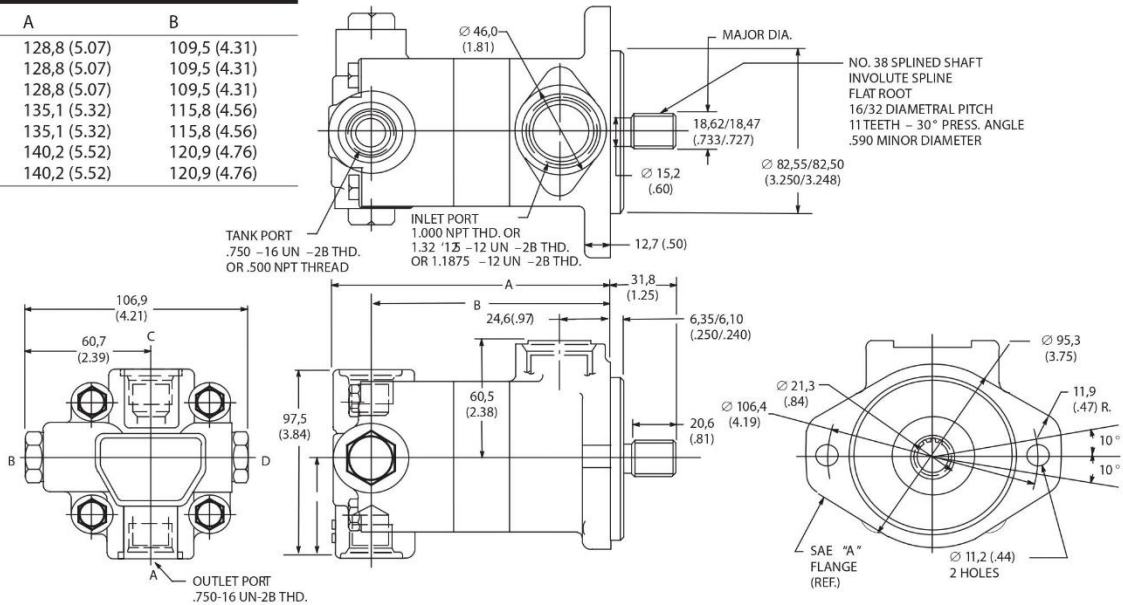


V10F Series

Dimensions in millimeters (inches).

Delivery @
1200 rpm
& 100 psi

	Dimensions	
	A	B
1 USgpm	128,8 (5.07)	109,5 (4.31)
2 USgpm	128,8 (5.07)	109,5 (4.31)
3 USgpm	128,8 (5.07)	109,5 (4.31)
4 USgpm	135,1 (5.32)	115,8 (4.56)
5 USgpm	135,1 (5.32)	115,8 (4.56)
6 USgpm	140,2 (5.52)	120,9 (4.76)
7 USgpm	140,2 (5.52)	120,9 (4.76)



V10P Series

Dimensions in millimeters (inches).

Delivery @
1200 rpm
& 100 psi

	Dimensions	
	A	B
1 USgpm	130,0 (5.12)	109,5 (4.31)
2 USgpm	130,0 (5.12)	109,5 (4.31)
3 USgpm	130,0 (5.12)	109,5 (4.31)
4 USgpm	136,4 (5.37)	115,8 (4.56)
5 USgpm	136,4 (5.37)	115,8 (4.56)
6 USgpm	141,5 (5.57)	120,9 (4.76)
7 USgpm	141,5 (5.57)	120,9 (4.76)

