

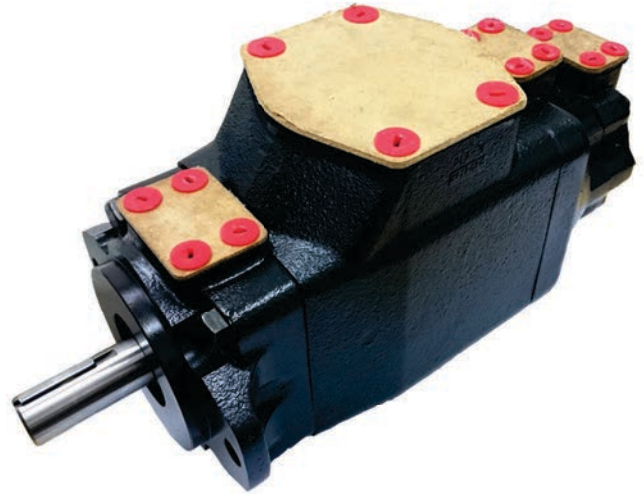
High Pressure Triple Vane Pump

HT6DCC/HT6DCCM Series

HOF

Features

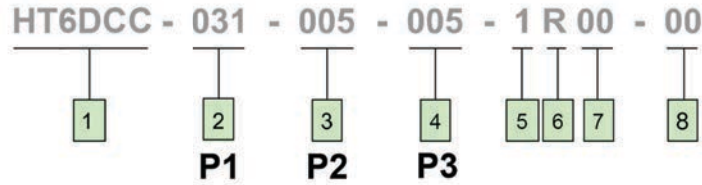
- HT6DCC/HT6DCCM Series are fixed displacement and balanced type triple vane pumps. The pump is designed for higher operating pressure and greater flow at the same housing size.
- With a balanced pin-vane design, outlet pressure is continuously applied only the pin. The pin provides the steady light force against the vane. Top and bottom areas of the vane are subject to the same pressure, either inlet or outlet pressure, depending on the vane's location during rotor rotation. This pin-vane design minimizes noise level and improves volumetric efficiency.
- With the cartridge independent of the shaft, allowing for easy change of flow capacity and field servicing without removing the pump from its mounting.



**Foot Mounting is available for each pump. For more details see Foot Mounts.*

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1 Model Series

Industrial - HT6DCC
 Mobile - HT6DCCM

2 Shaft End Pump (P1)

Ring Size (USgpm)

 6D - 014, 017, 020, 024, 028, 031, 035, 038, 042, 045, 050

3 Middle Pump (P2)

Ring Size (USgpm)

 6C - 003, 005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 031

4 Cover End Pump (P3)

Ring Size (USgpm)

 6C - 003, 005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 031

5 Shaft

- 1 - Keyed Shaft No SAE
- 2 - Keyed Shaft SAE CC
- 3 - Splined Shaft SAE C
- 4 - Splined Shaft SAE CC
- 6 - Splined Shaft No SAE (HT6DCCM only)

6 Shaft Rotation

(Viewed from shaft end)
 R - Turn right
 L - Turn left

7 Port Position

(Viewed from cover end)

 00 = Standard
 (For more detail see Porting Diagrams)

8 Port Connection

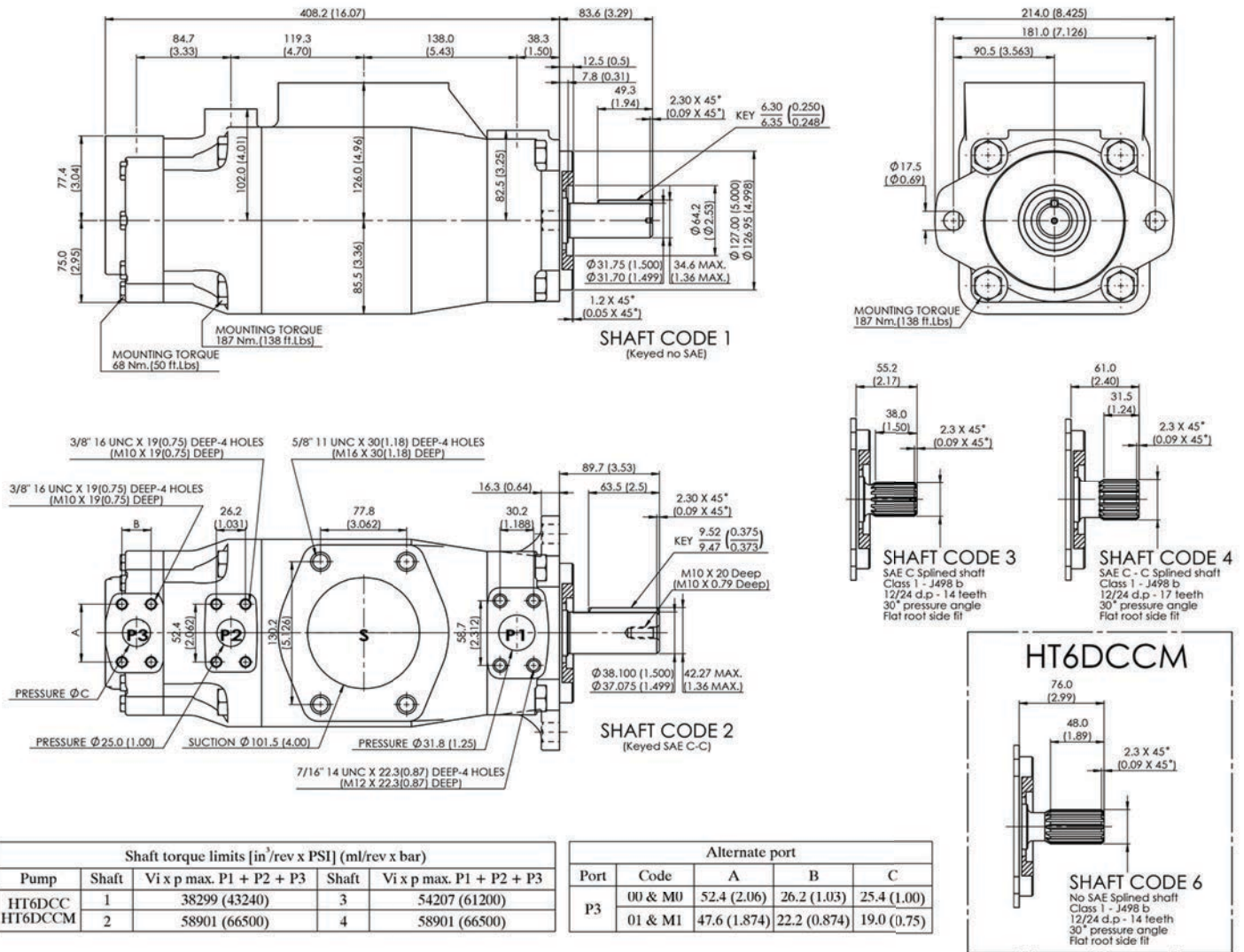
00 - UNC Port Connection
 M0 - Metric Port Connection

CODE		4 bolt SAE flanges			
UNC	Metric	P1	P2	P3	S
00	0M	1 1/4"	1"	1"	4"
01	M0	1 1/4"	1"	3/4"	4"

Specifications

HT6DCC, HT6DCCM Series Industrial and Mobile application

Shaft End Pump				Middle Pump				Cover End Pump				Min. Speed	Max. Speed	Weight
Size	Displacement	Max. Intermittent Pressure	Max. Continuous Pressure	Size	Displacement	Max. Intermittent Pressure	Max. Continuous Pressure	Size	Displacement	Max. Intermittent Pressure	Max. Continuous Pressure			
	cm ³ /r 1(in ³ /r)	bar (psi)	bar (psi)		cm ³ /r 1(in ³ /r)	bar (psi)	bar (psi)		cm ³ /r 1(in ³ /r)	bar (psi)	bar (psi)	rpm	rpm	kg (lb)
014	47.6 (2.90)	240 (3500)	206 (3000)	003	10.8 (0.66)	275 (4000)	240 (3500)	003	10.8 (0.66)	275 (4000)	240 (3500)	600	2500	62.0 (136.7)
017	58.2 (3.55)			005	17.2 (1.05)			005	17.2 (1.05)					
020	66.0 (4.00)			006	21.3 (1.30)			006	21.3 (1.30)					
024	79.5 (4.80)			008	26.4 (1.61)			008	26.4 (1.61)					
028	89.7 (5.50)			010	34.1 (2.08)			010	34.1 (2.08)					
031	98.3 (6.00)			012	37.1 (2.26)			012	37.1 (2.26)					
035	111.0 (6.80)			014	46.0 (2.81)			014	46.0 (2.81)					
038	120.3 (7.30)			017	58.3 (3.56)			017	58.3 (3.56)					
042	136.0 (8.30)			020	63.8 (3.89)			020	63.8 (3.89)					
045	145.7 (8.90)			022	70.3 (4.29)			022	70.3 (4.29)					
050	158.0 (9.64)	206 (3000)	160 (2300)	025	79.3 (4.84)	025	79.3 (4.84)	025	79.3 (4.84)	206 (3000)	160 (2300)			
				028	88.8 (5.42)	028	88.8 (5.42)	028	88.8 (5.42)					
				031	100.0 (6.10)	031	100.0 (6.10)	031	100.0 (6.10)					



Performance Characteristics

HT6DCC, HT6DCCM

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Pressure port	Series	Volumetric Displacement	Flow Q [GPM] & n = 1800 RPM			Input power P [HP] & n = 1800 RPM		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 100 PSI	p = 2000 PSI	p = 3500 PSI
P1	14	2.90 in ³ /rev	22.64	20.46	18.82	4.02	29.31	49.34
	17	3.55 in ³ /rev	27.68	25.50	23.86	4.31	35.20	59.64
	20	4.00 in ³ /rev	31.39	29.21	27.57	4.53	39.52	67.21
	24	4.80 in ³ /rev	37.82	35.63	33.99	4.91	47.02	80.32
	28	5.50 in ³ /rev	42.66	40.48	38.84	5.19	52.68	90.23
	31	6.00 in ³ /rev	46.75	44.57	42.93	5.43	57.45	98.58
	35	6.80 in ³ /rev	52.79	50.61	48.97	5.78	64.50	110.91
	38	7.30 in ³ /rev	57.21	55.03	53.39	6.04	69.66	119.94
	42 ²⁾	8.30 in ³ /rev	64.68	62.50	60.86	6.47	78.37	135.19
	45 ²⁾	8.90 in ³ /rev	69.29	67.11	65.47	6.74	83.75	144.61
	50 ²⁾	9.64 in ³ /rev	75.14	72.96	71.78 ¹⁾	7.08	90.58	134.54 ¹⁾
P2 & P3	03	.66 in ³ /rev	5.14	3.61	-	2.11	8.45	-
	05	1.05 in ³ /rev	8.18	6.65	5.56	2.29	12.00	19.59
	06	1.30 in ³ /rev	10.13	8.60	7.51	2.40	14.28	23.57
	08	1.61 in ³ /rev	12.55	11.02	9.93	2.54	17.11	28.53
	10	2.08 in ³ /rev	16.22	14.69	13.60	2.76	21.38	36.00
	12	2.26 in ³ /rev	17.64	16.11	15.02	2.84	23.05	38.92
	14	2.81 in ³ /rev	21.88	20.35	19.26	3.09	27.99	47.56
	17	3.56 in ³ /rev	27.73	26.20	25.11	3.43	34.81	59.51
	20	3.89 in ³ /rev	30.34	28.81	27.42	3.58	37.86	64.85
	22	4.29 in ³ /rev	33.43	31.90	30.81	3.76	41.47	71.16
	25	4.84 in ³ /rev	37.71	36.18	35.09	4.01	46.46	79.90
28	5.42 in ³ /rev	42.23	40.70	39.94 ¹⁾	4.27	51.74	76.73 ¹⁾	
31	6.10 in ³ /rev	47.56	46.03	45.27 ¹⁾	4.58	57.95	86.06 ¹⁾	

1) 28 - 31 - 50 = 3000 PSI max. int. 2) 42 - 45 - 50 = 2200 R.P.M. max
- Not to use because internal leakage greater than 50% theoretical flow Port connection can be furnished with metric threads.

