High Pressure Double Vane Pump HT6DCM/ HT6DCP/ HT6DCMW Series

Specification

HT6DCM, HT6DCP, HT6DCMW for Double pump

Shaft End Pump				Cover End Pump				Min. speed	Max. speed	Weight
Size	Displacement cm^3/r 1(in^3/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Size	Displacement cm^3/r 1(in^3/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	rpm	rpm	kg (lb)
014	47.6 (2.90)	240 (3500)	206 (3000)	003	10.8 (0.66)	275 (4000)	240 (3500)	400	2500	37.0 (81.4)
017	58.2 (3.55)			005	17.2 (1.05)					
020	66.0 (4.03)			006	21.3 (1.30)					
024	79.5 (4.85)			008	26.4 (1.61)					
028	89.7 (5.47)			010	34.1 (2.08)					
031	98.3 (6.00)			012	37.1 (2.26)					
035	111.0 (6.77)			014	46.0 (2.81)					
038	120.3 (7.34)			017	58.3 (3.56)					
042	136.0 (8.30)			020	63.8 (3.89)					
045	145.7 (8.89)			022	70.3 (4.29)					
050	158.0 (9.64)	206 (3000)	160 (2300)	025	79.3 (4.84)					
				028	88.8 (5.42)	206 (3000)	160 (2300)			
				031	100.0 (6.10)					

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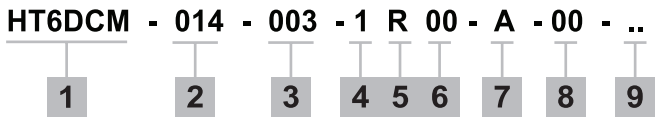
Ordering Code : Double Pump



1. Model :
   Mobile 1 Shaft seals (M) - HT6DCM
   Mobile 2 Shaft seals (P) - HT6DCP
   Severe Duty Shaft (W) - HT6DCMW
   SAE C 2 bolts mounting flange J744

2. Displacement P1
   Volumetric displacement cm³/rec (in³/rev)
   - 014 - 47.6 (2.90)
   - 017 - 58.2 (3.55)
   - 020 - 66.0 (4.03)
   - 024 - 79.5 (4.85)
   - 028 - 89.7 (5.47)
   - 031 - 98.3 (6.00)
   - 035 - 111.0 (6.77)
   - 038 - 120.3 (7.34)
   - 042 - 136.0 (8.30)
   - 045 - 145.7 (8.89)
   - 050 - 158.0 (9.64)

3. Displacement P2
   Volumetric displacement cm³/rec (in³/rev)
   - 003 - 10.8 (0.66)
   - 005 - 17.2 (1.05)
   - 006 - 21.3 (1.30)
   - 008 - 26.4 (1.61)
   - 010 - 34.1 (2.08)
   - 012 - 37.1 (2.26)
   - 014 - 46.0 (2.81)
   - 017 - 58.3 (3.56)
   - 020 - 63.8 (3.89)
   - 022 - 70.3 (4.29)
   - 025 - 79.3 (4.84)
   - 028 - 88.8 (5.42)
   - 031 - 100.0 (6.10)

4. Type of shaft
   HT6DCM
   - 1 - SAE C Keyed Shaft
   - 2 - non SAE Keyed Shaft
   - 3 - SAE C Splined Shaft
   - 4 - SAE C spec. Splined Shaft

   HT6DCMW
   - 5 - non SAE Keyed Shaft
   - T - SAE J718c Splined Shaft
   - V - Special Keyed Shaft

   HT6DCP
   - 3 - non SAE Splined Shaft

5. Direction of rotation (Viewed from shaft end)
   - R - Turn right
   - L - Turn left

6. Porting combination (see page Porting Diagrams)
   - 00 - standard

7. Design letter

8. Port Connection (4 bolts SAE flange J518C)
   - 00 - UNC Port Connection
   - M0 - Metric Port Connection

Code		4 bolt SAE flanges		
UNC	Metric	P1	P2	S
00	M0	1¼"	1"	3"
01	M1	1¼"	3/4"	3"

9. Modifications

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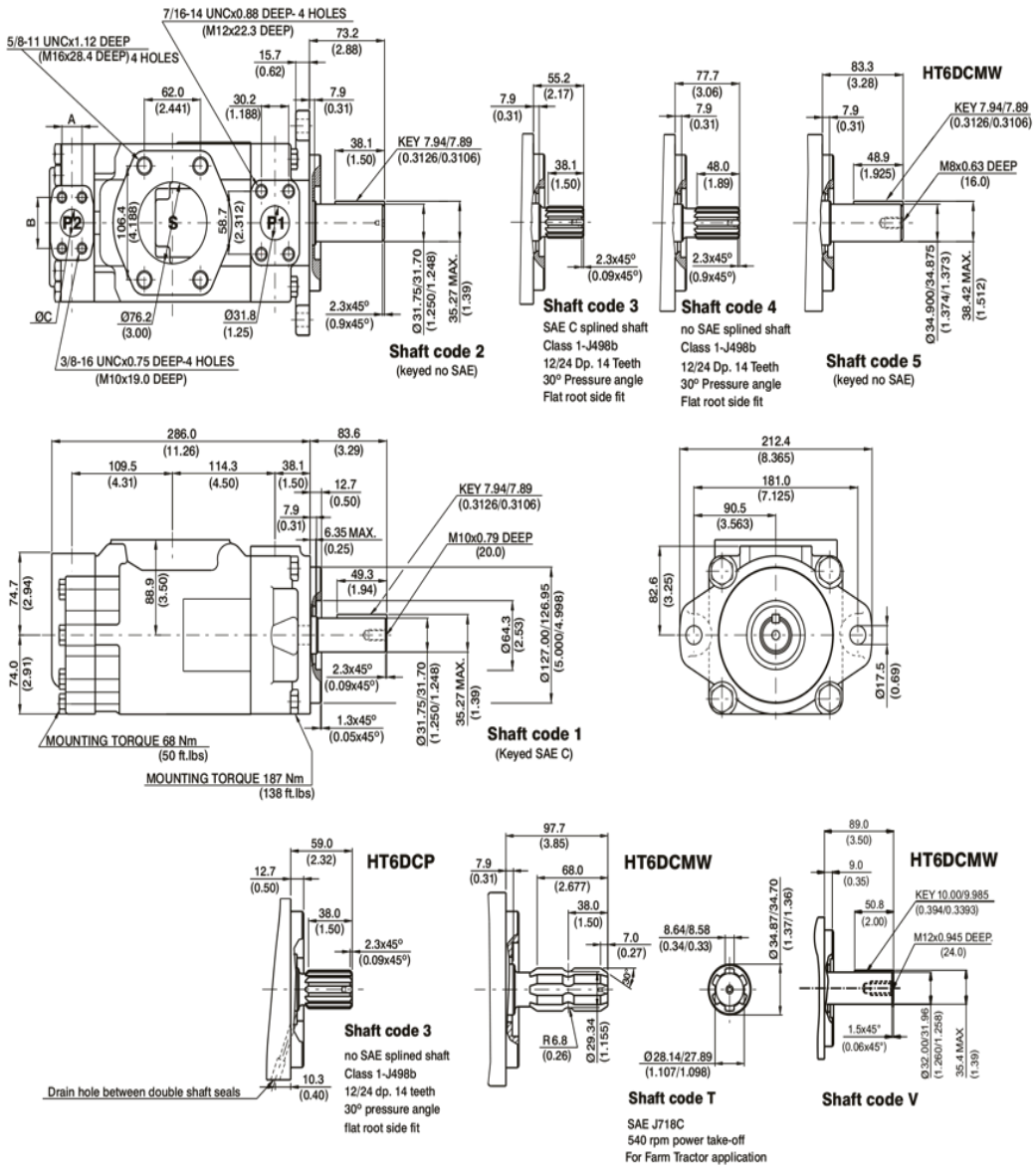
Installation Dimension mm (inch)

HT6DCM, HT6DCP, HT6DCMW



Shaft torque limits [ml/rev x bar (in³/rev x psi)]	
Shaft	Vp x p max. (P1+P2)
1	43240 (38299)
2	34590 (30638)
3	61200 (54207)
4	
5	55600 (49247)
T	66600 (58990)

Cover End Outlet Port Size	A	B	C
1"	26.2 (1.03)	52.4 (2.06)	25.4 (1.00)
3/4"	22.4 (0.88)	47.7 (1.88)	19.0 (0.75)

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Performance Characteristics

HT6DCM, HT6DCP, HT6DCMW

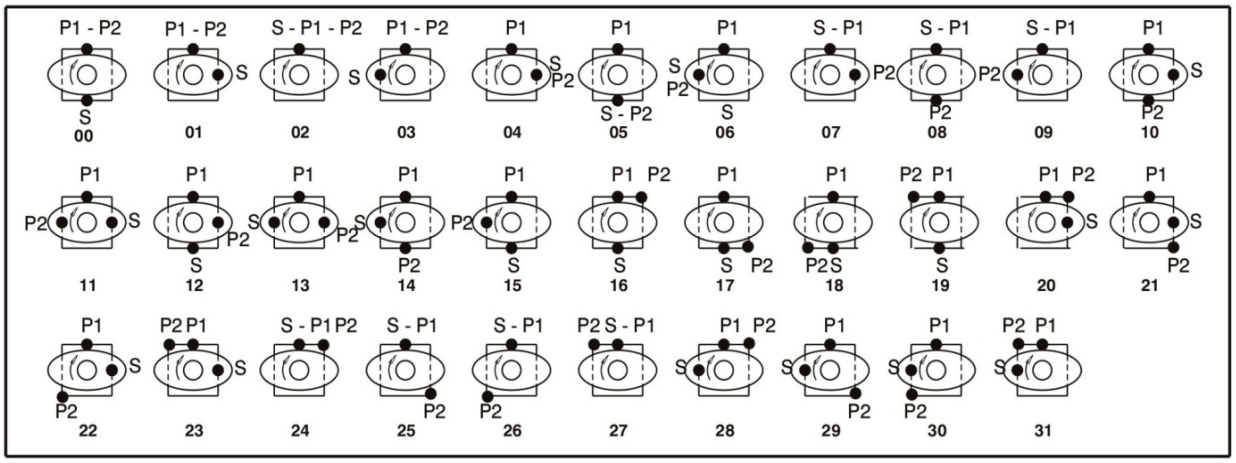
OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

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 = 0 PSI	p = 2000 PSI	p = 3500 PSI
P1	014	2.90 in³/rev	22.64	20.46	18.82	4.02	29.31	49.34
	017	3.55 in³/rev	27.68	25.50	23.86	4.31	35.20	59.64
	020	4.00 in³/rev	31.39	29.21	27.57	4.53	39.52	67.21
	024	4.80 in³/rev	37.82	35.63	33.99	4.91	47.02	80.32
	028	5.50 in³/rev	42.66	40.48	38.84	5.19	52.68	90.23
	031	6.00 in³/rev	46.75	44.57	42.93	5.43	57.45	98.58
	035	6.80 in³/rev	52.79	50.61	48.97	5.78	64.50	110.91
	038	7.30 in³/rev	57.21	55.03	53.39	6.04	69.66	119.94
	042[2)]	8.30 in³/rev	64.68	62.50	60.86	6.47	78.37	135.19
	045[2)]	8.90 in³/rev	69.29	67.11	65.47	6.74	83.74	144.61
	050[2)]	9.64 in³/rev	75.14	72.96	71.78[1)]	7.08	90.58	134.54[1)]
P2	003	0.66 in³/rev	5.14	3.61	-	2.11	8.45	-
	005	1.05 in³/rev	8.18	6.65	5.56	2.29	12.00	19.59
	006	1.30 in³/rev	10.13	8.60	7.51	2.40	14.28	23.57
	008	1.61 in³/rev	12.55	11.02	9.93	2.54	17.11	28.53
	010	2.08 in³/rev	16.22	14.69	13.60	2.76	21.38	36.00
	012	2.26 in³/rev	17.64	16.11	15.02	2.84	23.05	38.92
	014	2.81 in³/rev	21.88	20.35	19.26	3.09	27.99	47.56
	017	3.56 in³/rev	27.73	26.20	25.11	3.43	34.81	59.51
	020	3.89 in³/rev	30.34	28.81	27.42	3.58	37.86	64.85
	022	4.29 in³/rev	33.43	31.90	30.81	3.76	41.47	71.16
	025	4.84 in³/rev	37.71	36.18	35.09	4.01	46.46	79.90
	028	5.42 in³/rev	42.23	40.70	39.94[1)]	4.27	51.74	76.73[1)]
	031	6.10 in³/rev	47.56	46.03	45.27[1)]	4.58	57.95	86.06[1)]

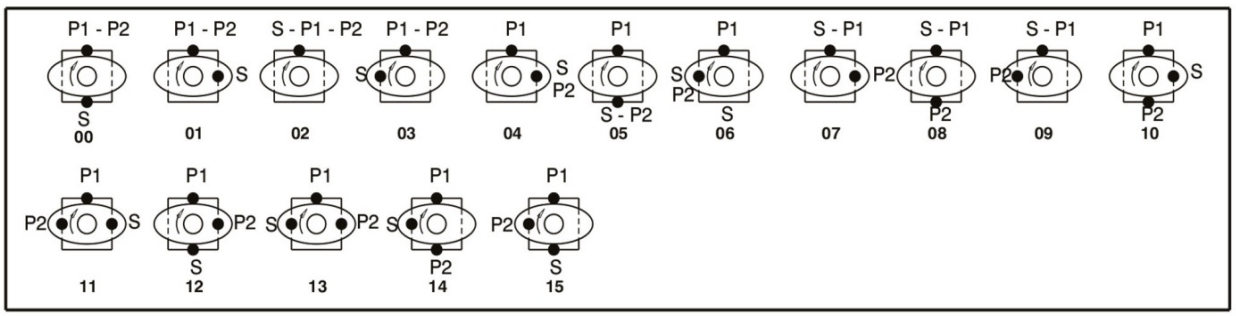
1) 028 - 031 - 050 = 3000 PSI max. int.
2) 042 - 045 - 050 = 2200 R.P.M. max
- Not to use because internal leakage greater than 50% theoretical flow.
- Port connection can be furnished with metric threads.

High Pressure Double Vane Pump
HT6/HT67/HT7 Series - Porting Diagram

Porting Diagrams



HT6CC/HT6CCM/HT6CCP/HT6CCW/HT6CCMW, HT6DCM/HT6DCP/HT6DCMW, HT6ECM/HT6ECP
HT7BB/HT7BBS, HT7DB/HT7DBS, HT7EB/HT7EBS
HT67CB/HT67CBW, HT67DC/HT67DCW, HT67EC



HT6EDM/HT6EDP
HT7DD/HT7DDS, HT7ED/HT7EDS, HT7EE/HT7EES