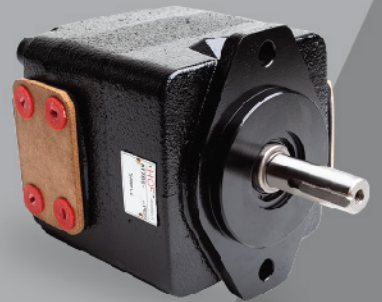
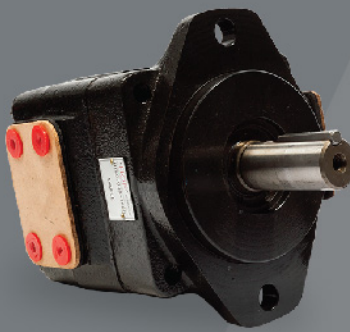




Hydraulic Single Vane Pumps HT6 & HT7 Series

Catalog 2021

High Pressure Single Vane Pump

HT6C/HT6CM Series

Specification

HT6C for Single pump

Size	Displacement cm ³ /r 1(in ³ /r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight
003	10.8 (0.66)	275 (4000)	240 (3500)	600	2800	15.0 (33.0)
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)	206 (3000)	160 (2300)		2500	
025	79.3 (4.84)					
028	88.8 (5.42)					
031	100.0 (6.10)					

HT6CM for Single pump

Size	Displacement cm ³ /r 1(in ³ /r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight
003	10.8 (0.66)	275 (4000)	240 (3500)	400	2800	15.0 (33.0)
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)	206 (3000)	160 (2300)		2500	
025	79.3 (4.84)					
028	88.8 (5.42)					
031	100.0 (6.10)					

High Pressure Single Vane Pump

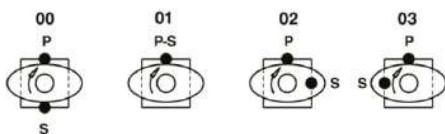
HT6C/HT6CM Series

Ordering Code : Single Pump

HT6C - 003 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1. Model :
 - Industrial - HT6C
 - Mobile 1 Shaft seals (M) - HT6CM SAE B 2 bolts mounting flange J744
2. Displacement
 - 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)
3. Type of shaft
 - 1 - SAE B Keyed Shaft
 - 2 - non SAE Keyed Shaft
 - 3 - SAE B Splined Shaft
 - 4 - SAE BB Splined Shaft
4. Direction of rotation (Viewed from shaft end)
 - R - Turn right
 - L - Turn left
5. Porting combination
 - 00 - standard
6. Design letter
7. Port Connection (4 bolts SAE flange J518C)
 - 00 - UNC Port Connection
 - M0 - Metric Port Connection
8. Modifications

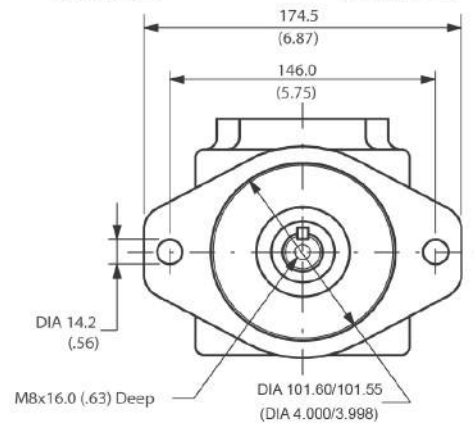
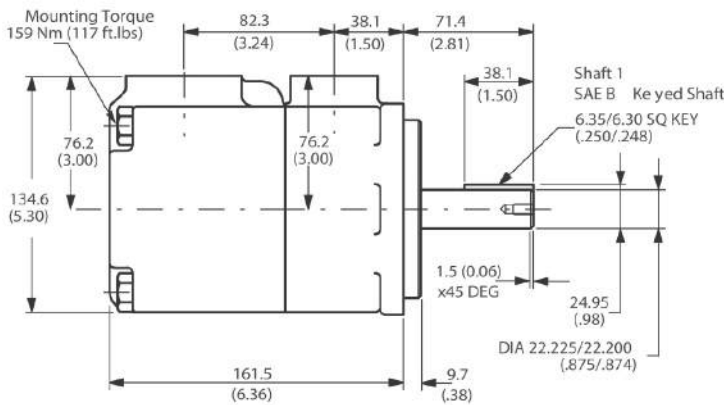
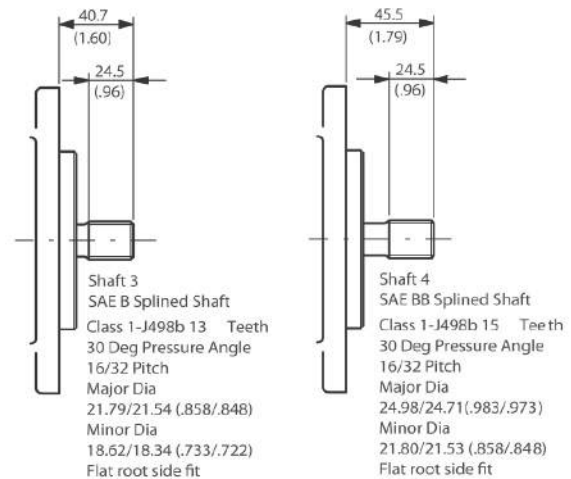
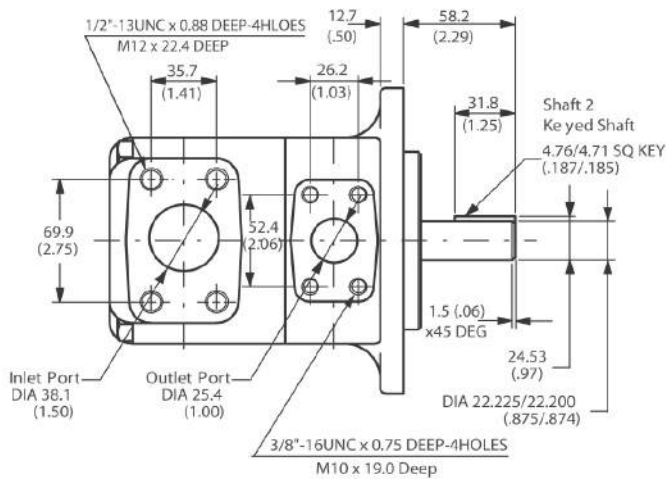


S - Suction port P - Pressure port

High Pressure Single Vane Pump HT6C/HT6CM Series

Installation Dimension mm (inch)

HT6C, HT6CM



High Pressure Single Vane Pump

HT6C/HT6CM Series

Performance Characteristics

HT6C, HT6CM

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Speed n [R.P.M]	Flow Q [GPM]			Input power P [HP]		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 100 PSI	p = 2000 PSI	p = 3500 PSI
03	0.66 in ³ /rev	1200	3.42	-	-	1.43	-	-
		1800	5.14	3.61	-	2.11	8.45	-
05	1.05 in ³ /rev	1200	5.45	3.99	-	1.55	8.17	-
		1800	8.18	6.65	5.56	2.29	12.00	19.59
06	1.30 in ³ /rev	1200	6.75	5.22	4.13	1.62	9.69	16.13
		1800	10.13	8.60	7.51	2.40	14.28	23.57
08	1.61 in ³ /rev	1200	8.37	6.84	5.75	1.72	11.58	19.43
		1800	12.55	11.02	9.93	2.54	17.11	28.53
10	2.08 in ³ /rev	1200	10.81	9.28	8.19	1.86	14.43	24.42
		1800	16.22	14.69	13.60	2.76	21.38	36.00
12	2.26 in ³ /rev	1200	11.76	10.23	9.14	1.92	15.53	26.36
		1800	17.64	16.11	15.02	2.84	23.05	38.92
14	2.81 in ³ /rev	1200	14.58	13.05	11.96	2.08	18.83	32.12
		1800	21.88	20.35	19.26	3.09	27.99	47.56
17	3.56 in ³ /rev	1200	18.48	16.95	15.86	2.31	23.38	40.08
		1800	27.73	26.20	25.11	3.43	34.81	59.51
20	3.89 in ³ /rev	1200	20.23	18.70	17.61	2.41	25.41	43.64
		1800	30.34	28.81	27.42	3.58	37.86	64.85
22	4.29 in ³ /rev	1200	22.29	20.76	19.67	2.53	27.82	47.85
		1800	33.43	31.90	30.81	3.76	41.47	71.16
25 ¹⁾	4.84 in ³ /rev	1200	25.14	23.61	22.52	2.70	31.15	53.68
		1800	37.71	36.18	35.09	4.01	46.46	79.90
28 ¹⁾	5.42 in ³ /rev	1200	28.15	26.62	25.86 ²⁾	2.87	34.66	51.37 ²⁾
		1800	42.23	40.70	39.94 ²⁾	4.27	51.74	76.73 ²⁾
31 ¹⁾	6.10 in ³ /rev	1200	31.70	30.17	29.41 ²⁾	3.08	38.80	57.58 ²⁾
		1800	47.56	46.03	45.27 ²⁾	4.58	57.95	86.06 ²⁾

1) 25 - 28 - 31 = 2500 R.P.M. max. 2) 28 - 31 = 3000 PSI max. int.
 - Not to use because internal leakage greater than 50% theoretical flow.
 - Port connection can be furnished with metric threads.

High Pressure Single Vane Pump

HT6CP Series

Specification

HT6CP for Single pump

Size	Displacement cm³/r 1(in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight
014	46.0 (2.81)	275 (4000)	240 (3500)	400	2800	15.0 (33.0)
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)	206 (3000)	160 (2300)	2500		
031	100.0 (6.10)					

High Pressure Single Vane Pump HT6CP Series

Ordering Code : Single Pump

HT6CP - 003 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1. Model :

Mobile 2 Shaft seals (P) - HT6CP
SAE C 2 bolts mounting flange J744

2. Displacement

Volumetric displacement cm³/rec (in³/rev)

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)

3. Type of shaft

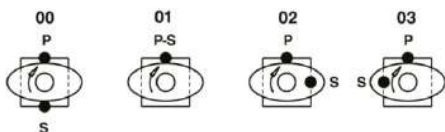
2 - non SAE Keyed Shaft
3 - SAE C Splined Shaft

4. Direction of rotation (Viewed from shaft end)

R - Turn right
L - Turn left

5. Porting combination

00 - standard



S - Suction port P - Pressure port

6. Design letter

7. Port Connection (4 bolts SAE flange J518C)

M0 - Metric Port Connection

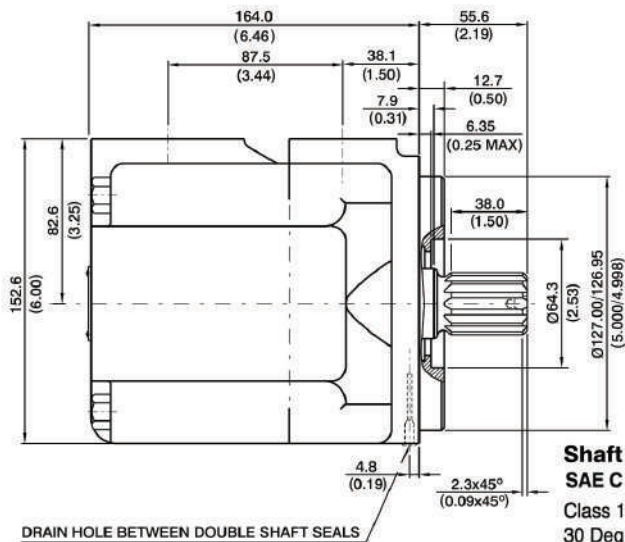
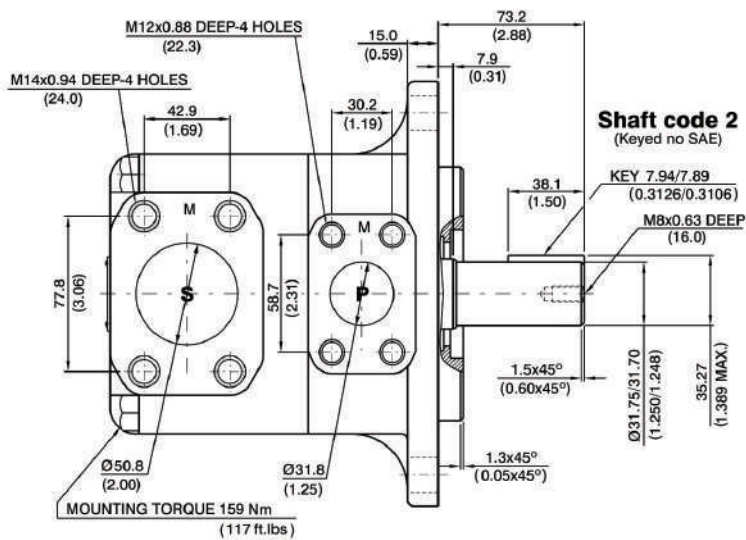
8. Modifications

High Pressure Single Vane Pump

HT6CP Series

Installation Dimension mm (inch)

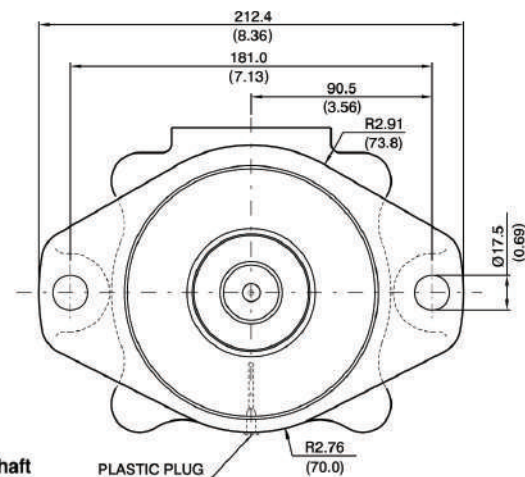
HT6CP



Shaft code 3

SAE C Splined Shaft

Class 1-J498b 14 Teeth
30 Deg Pressure Angle
12/24 Pitch
Major Dia
31.22/30.96 (1.229/1.219)
Minor Dia
26.99/26.66 (1.063/1.050)
Flat root side fit



High Pressure Single Vane Pump

HT6CP Series

Performance Characteristics

HT6CP

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Speed n [R.P.M]	Flow Q [GPM]			Input power P [HP]		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 100 PSI	p = 2000 PSI	p = 3500 PSI
14	2.81 in ³ /rev	1200 1800	14.58 21.88	13.05 20.35	11.96 19.26	2.08 3.09	18.83 27.99	32.12 47.56
17	3.56 in ³ /rev	1200 1800	18.48 27.73	16.95 26.20	15.86 25.11	2.31 3.43	23.38 34.81	40.08 59.51
20	3.89 in ³ /rev	1200 1800	20.23 30.34	18.70 28.81	17.61 27.42	2.41 3.58	25.41 37.86	43.64 64.85
22	4.29 in ³ /rev	1200 1800	22.29 33.43	20.76 31.90	19.67 30.81	2.53 3.76	27.82 41.47	47.85 71.16
25 ¹⁾	4.84 in ³ /rev	1200 1800	25.14 37.71	23.61 36.18	22.52 35.09	2.70 4.01	31.15 46.46	53.68 79.90
28 ¹⁾	5.42 in ³ /rev	1200 1800	28.15 42.23	26.62 40.70	25.86 ²⁾ 39.94 ²⁾	2.87 4.27	34.66 51.74	51.37 ²⁾ 76.73 ²⁾
31 ¹⁾	6.10 in ³ /rev	1200 1800	31.70 47.56	30.17 46.03	29.41 ²⁾ 45.27 ²⁾	3.08 4.58	38.80 57.95	57.58 ²⁾ 86.06 ²⁾

1) 25 - 28 - 31 = 2500 R.P.M. max.

2) 28 - 31 = 3000 PSI max. int.

High Pressure Single Vane Pump

HT6DM/HT6DP Series

Specification

HT6DM, HT6DP for Single pump

Size	Displacement cm ³ /r 1(in ³ /r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight
014	47.6 (2.90)	240 (3500)	206 (3000)	400	2500	26.4 (58.0)
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)	206 (3000)	160 (2300)		2200	
050	158.0 (9.64)					

High Pressure Single Vane Pump

HT6DM/HT6DP Series

Ordering Code : Single Pump

HT6DM - 014 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1. Model :

Mobile 1 Shaft seals (M) - HT6DM
Mobile 2 Shaft seals (P) - HT6DP
SAE C 2 bolts mounting flange J744

2. Displacement

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. Type of shaft

HT6DM

1 - SAE C Keyed Shaft
2 - non SAE Keyed Shaft
3 - SAE C Splined Shaft
4 - non SAE Splined Shaft

HT6DP

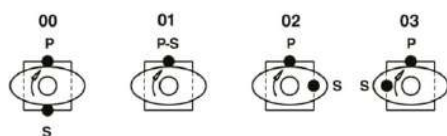
3 - non SAE Splined Shaft

4. Direction of rotation (Viewed from shaft end)

R - Turn right
L - Turn left

5. Porting combination

00 - standard



S - Suction port P - Pressure port

6. Design letter

7. Port Connection (4 bolts SAE flange J518C)

00 - UNC Port Connection (Except HT7D)
M0 - Metric Port Connection

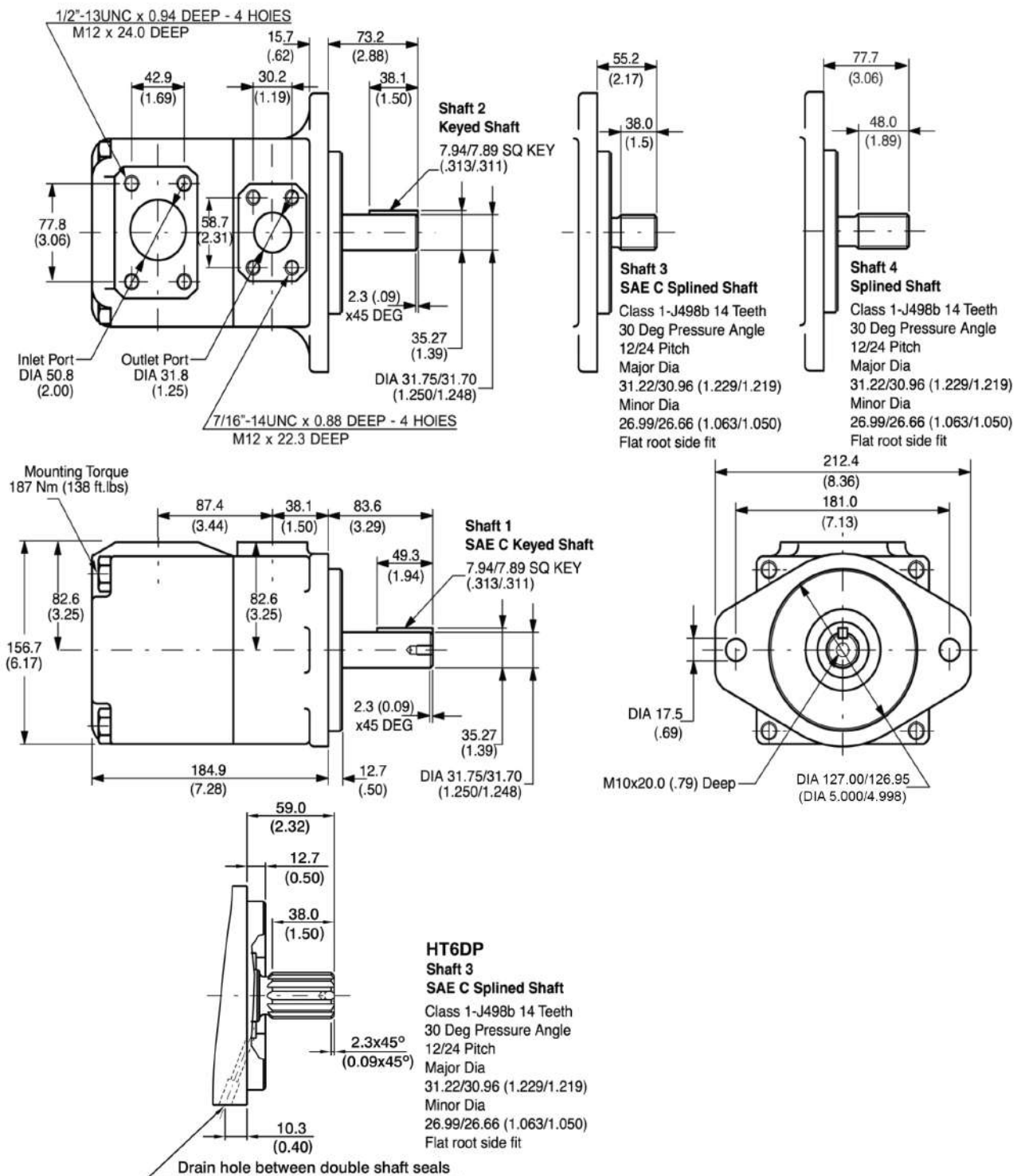
8. Modifications

High Pressure Single Vane Pump

HT6DM/HT6DP Series

Installation Dimension mm (inch)

HT6DM, HT6DP



High Pressure Single Vane Pump

HT6DM/HT6DP Series

Performance Characteristics

HT6DM, HT6DP

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Speed n [R.P.M]	Flow Q [GPM]			Input power P [HP]		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 100 PSI	p = 2000 PSI	p = 3500 PSI
14	2.90 in ³ /rev	1200 1800	15.09 22.64	12.91 20.46	11.27 18.82	2.44 4.02	19.60 29.31	33.20 49.34
17	3.55 in ³ /rev	1200 1800	18.45 27.68	16.27 25.50	14.63 23.86	2.64 4.31	23.52 35.20	40.06 59.64
20	4.00 in ³ /rev	1200 1800	20.92 31.39	18.74 29.21	17.10 27.57	2.78 4.53	26.41 39.52	45.11 67.21
24	4.80 in ³ /rev	1200 1800	25.20 37.81	23.02 35.63	21.38 33.99	3.03 4.91	31.40 47.02	53.85 80.32
28	5.50 in ³ /rev	1200 1800	28.44 42.66	26.26 40.48	24.62 38.84	3.22 5.19	35.17 52.68	60.45 90.23
31	6.00 in ³ /rev	1200 1800	31.17 46.75	28.99 44.57	27.35 42.93	3.38 5.43	38.36 57.45	66.02 98.58
35	6.80 in ³ /rev	1200 1800	35.19 52.79	33.01 50.61	31.37 48.97	3.61 5.78	43.05 64.50	74.24 110.91
38	7.30 in ³ /rev	1200 1800	38.14 57.21	35.96 55.03	34.32 53.39	3.79 6.04	46.49 69.66	80.26 119.94
42 ¹⁾	8.30 in ³ /rev	1200 1800	43.12 64.68	40.94 62.50	39.30 60.86	4.08 6.47	52.30 78.37	90.43 135.19
45 ¹⁾	8.90 in ³ /rev	1200 1800	46.19 69.29	44.01 67.11	42.37 65.47	4.26 6.74	55.89 83.75	96.71 144.61
50 ¹⁾	9.64 in ³ /rev	1200 1800	50.09 75.14	47.91 72.96	46.73 ²⁾ 71.78 ²⁾	4.48 7.08	60.44 90.58	89.93 ²⁾ 134.54 ²⁾

1) 42 - 45 - 50 = 2200 R.P.M. max. 2) 50 = 3000 PSI max. int.
Port connection can be furnished with metric threads.

High Pressure Single Vane Pump

HT6EM/HT6EP Series

Specification

HT6EM/HT6EP for Single pump

Size	Displacement cm ³ /r 1(in ³ /r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight
042	132.3 (8.07)	240 (3500)	206 (3000)	400	2200	42.0 (92.4)
045	142.4 (8.70)					
050	158.5 (9.67)					
052	164.8 (10.00)					
062	196.7(12.00)					
066	213.3 (13.00)					
072	227.1 (13.86)					

High Pressure Single Vane Pump

HT6EM/HT6EP Series

Ordering Code : Single Pump

HT6EM - 042 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1. Model :

Mobile 1 Shaft seals (M) - HT6EM
Mobile 2 Shaft seals (P) - HT6EP
SAE C 2 bolts mounting flange J744

7. Port Connection (4 bolts SAE flange J518C)

00 - UNC Port Connection
M0 - Metric Port Connection

2. Displacement

Volumetric displacement cm³/rec (in³/rev)

042 - 132.3 (8.07)
045 - 142.4 (8.70)
050 - 158.5 (9.67)
052 - 164.8 (10.00)
062 - 196.7 (12.00)
066 - 213.3 (13.00)
072 - 227.1 (13.86)

8. Modifications

3. Type of shaft

HT6EM

1 - SAE CC Keyed Shaft
2 - non SAE Keyed Shaft
3 - SAE C Splined Shaft
4 - SAE CC Splined Shaft
T - SAE J718c Splined Shaft

HT6EP

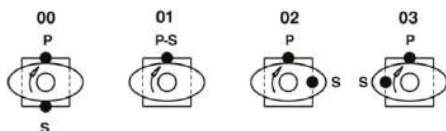
3 - non SAE Splined Shaft

4. Direction of rotation (Viewed from shaft end)

R - Turn right
L - Turn left

5. Porting combination

00 - standard



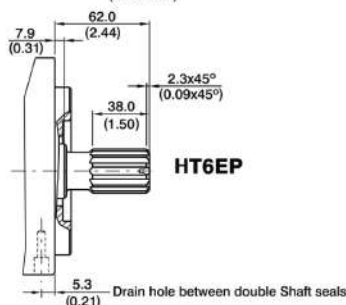
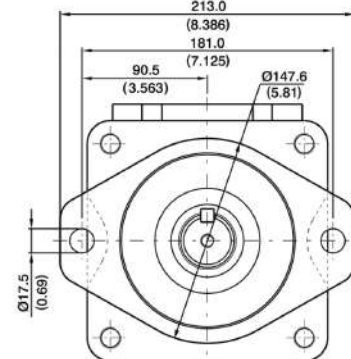
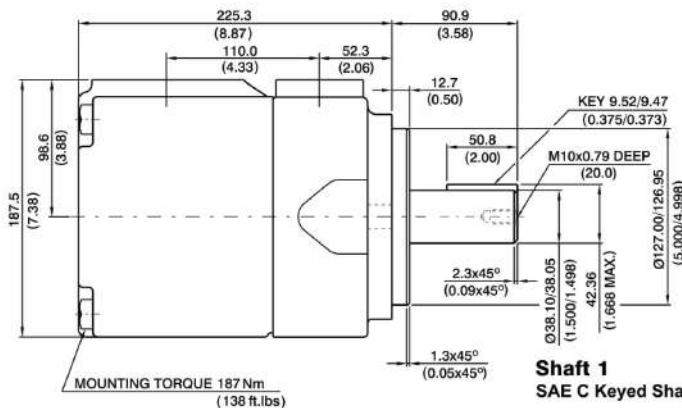
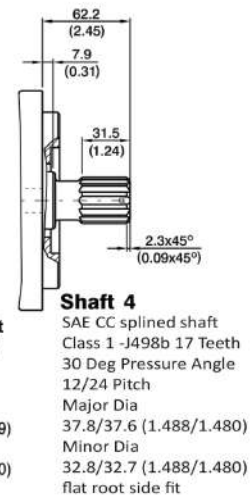
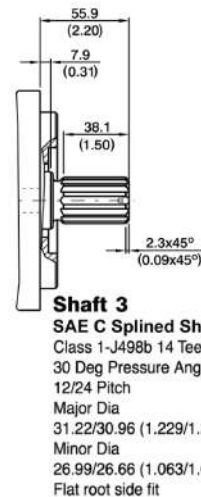
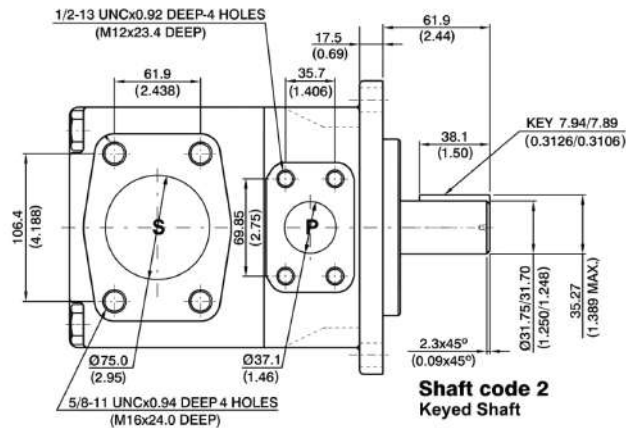
S - Suction port P - Pressure port

6. Design letter

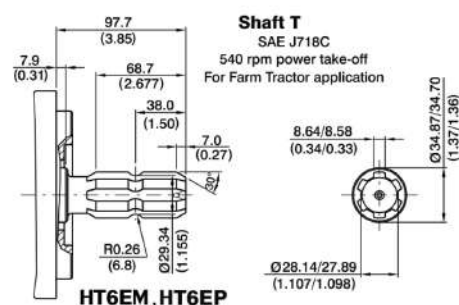
High Pressure Single Vane Pump HT6EM/HT6EP Series

Installation Dimension mm (inch)

HT6EM/HT6EP



Shaft 3
no SAE splined shaft
Class 1-J498b 14 Teeth
30 Deg Pressure Angle
12/24 Pitch
Major Dia
31.22/30.96 (1.063/1.050)
Minor Dia
26.99/26.66 (1.063/1.050)
flat root side fit



High Pressure Single Vane Pump

HT6EM/HT6EP Series

Performance Characteristics

HT6EM/HT6EP

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Speed n [R.P.M]	Flow Q [GPM]			Input power P [HP]		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 100 PSI	p = 2000 PSI	p = 3500 PSI
042	8.07 in ³ /rev	1200	41.94	39.39	37.54	5.35	52.28	89.29
		1800	62.92	60.37	58.52	8.09	78.44	133.80
045	8.70 in ³ /rev	1200	45.15	42.60	40.75	4.33	54.72	94.43
		1800	67.12	65.17	63.32	6.87	82.09	141.51
050	9.67 in ³ /rev	1200	50.25	47.70	45.85	4.63	60.68	104.85
		1800	75.38	72.83	70.98	7.32	91.02	157.15
052	10.00 in ³ /rev	1200	52.25	49.70	47.85	4.75	63.01	108.93
		1800	78.37	75.82	73.97	7.49	94.52	163.27
062	12.00 in ³ /rev	1200	62.36	59.81	57.96	5.34	74.81	129.58
		1800	93.54	90.99	89.14	8.38	112.22	194.24
066	13.00 in ³ /rev	1200	67.62	65.07	63.22	5.65	80.95	140.33
		1800	101.44	98.89	97.04	8.84	121.43	210.37
072	13.86 in ³ /rev	1200	72.00	69.45	67.60	5.90	86.05	149.26
		1800	108.00	105.45	103.60	9.22	129.09	223.77

High Pressure Single Vane Pump

HT7B/HT7BS Series

Specification

HT7B, HT7BS for Single pump

Size	Displacement cm ³ /r 1(in ³ /r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight
002	5.8 (0.35)	320 (4640)	290 (4200)	600	3600	23.5 (51.8)
003	9.8 (0.59)					
004	12.8 (0.78)					
005	15.9 (0.97)					
006	19.8 (1.20)					
007	22.5 (1.37)					
008	24.9 (1.51)					
009	28.0 (1.70)					
010	31.8 (1.94)	300 (4350)	275 (4000)	600	3000	23.5 (51.8)
011	35.0 (2.13)					
012	41.0 (2.50)					
014	45.0 (2.74)					
015	50.0 (3.05)	280 (4060)	240 (3500)	600	3000	23.5 (51.8)

High Pressure Single Vane Pump

HT7B/HT7BS Series

Ordering Code : Single Pump

HT7BS - 002 - 1 R 00 - A - 00 - ..

1
2
3
4
5
6
7
8

1. Model :

- Industrial - HT7B ISO 2 bolts 3019-2 mounting flange 100 A2 HW
- HT7BS SAE B 2 bolts mounting flange J744

2. Displacement

Volumetric displacement cm³/rec (in³/rev)

- 002 - 5.8 (0.35)
 003 - 9.8 (0.60)
 004 - 12.8 (0.78)
 005 - 15.9 (0.97)
 006 - 19.8 (1.20)
 007 - 22.5 (1.37)
 008 - 24.9 (1.51)
 009 - 28.0 (1.70)
 010 - 31.8 (1.92)
 011 - 35.0 (2.14)
 012 - 41.0 (2.47)
 014 - 45.0 (2.70)
 015 - 50.0 (3.01)

3. Type of shaft

HT7B, HT7BS
 2 - ISO R775-G38M Keyed Shaft

HT7BS

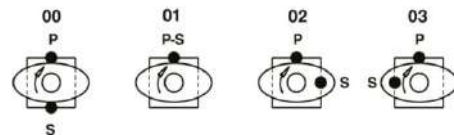
- 1 - SAE B Keyed Shaft
 3 - SAE B Splined Shaft
 4 - SAE BB Splined Shaft

4. Direction of rotation (Viewed from shaft end)

- R - Turn right
 L - Turn left

5. Porting combination

00 - standard



S - Suction port P - Pressure port

6. Design letter

7. Port Connection (4 bolts SAE flange J518C)

- 00 - UNC Port Connection (Except HT7B)
 M0 - Metric Port Connection

Code		4 bolt SAE flanges	
UNC	Metric	P1	S
00	M0	1"	1 ½"
01	M1	3/4"	1 ½"

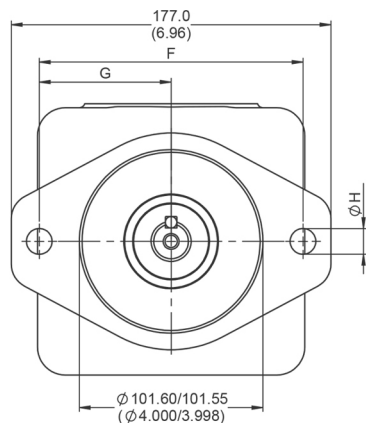
8. Modifications

High Pressure Single Vane Pump

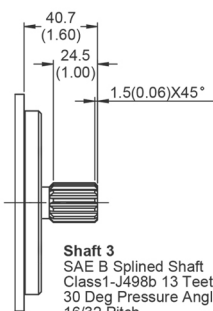
HT7B/HT7BS Series

Installation Dimension mm (inch)

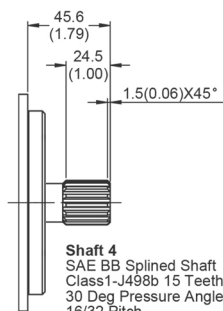
HT7B, HT7BS



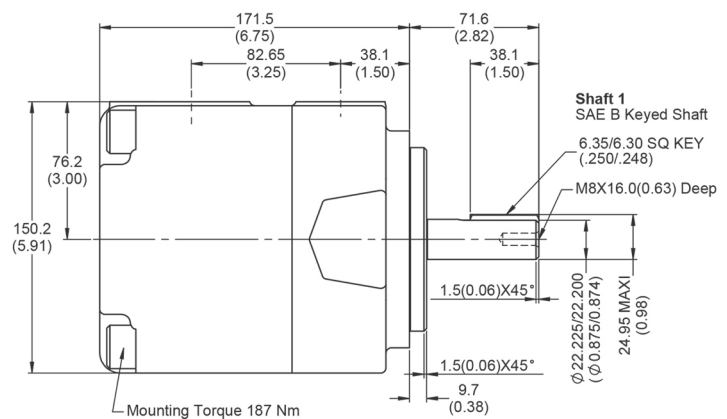
HT7BS
(FLANGE SAE B)



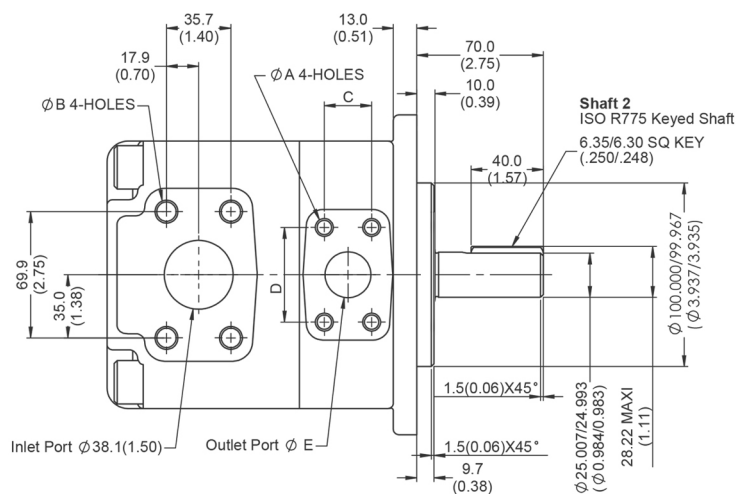
Shaft 3
SAE B Splined Shaft
Class1-J498b 13 Teeth
30 Deg Pressure Angle
16/32 Pitch
Major Dia.
21.79/21.54(0.858/0.848)
Minor Dia.
18.62/18.34(0.733/0.722)
Flat root side fit



Shaft 4
SAE BB Splined Shaft
Class1-J498b 15 Teeth
30 Deg Pressure Angle
16/32 Pitch
Major Dia.
24.98/24.71(0.983/0.973)
Minor Dia.
21.80/21.53(0.858/0.848)
Flat root side fit



Shaft 1
SAE B Keyed Shaft
6.35/6.30 SQ KEY
(.250/.248)
M8X16.0(0.63) Deep



HT7B
(FLANGE ISO 3019/2 100A 2HW)

Model	HT7B/BS		HT7BS	
Code	M0	M1	00	01
ØA	M10 x19.0 DEEP		3/8"-16 UNC x 19.0 DEEP	
ØB	M12 x 22.4 DEEP		1/2" -13 UNC x 22.4 DEEP	
C	26.2	22.25	26.2	22.25
D	52.4	47.65	52.4	47.65
ØE	25.4	19.1	25.4	19.1
F	140.0		146.0	
G	70.0		73.0	
ØH	14.0		14.3	

Shaft torque limits [ml/rev. x bar]	
Shaft	V _i x p max.
1	16500
2	20600
3	
4	

High Pressure Single Vane Pump

HT7B/HT7BS Series

Performance Characteristics

HT7B, HT7BS

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Speed n [R.P.M]	Flow Q [GPM]			Input power P [HP]		
			p = 0 PSI	p = 2000 PSI	p = 4650 PSI	p = 100 PSI	p = 2000 PSI	p = 4650 PSI
02	0.35 in ³ /rev	1500	2.29	1.84	1.26	0.67	3.48	7.23
03	0.59 in ³ /rev		3.88	3.43	2.85	0.80	5.36	11.52
04	0.78 in ³ /rev		5.07	4.62	4.04	0.80	6.70	14.74
05	0.97 in ³ /rev		6.31	5.86	5.28	0.93	8.17	18.09
06	1.20 in ³ /rev		7.84	7.39	6.81	0.93	10.05	22.25
07	1.37 in ³ /rev		8.90	8.45	7.89	1.07	11.39	25.20
08	1.51 in ³ /rev		9.88	9.43	8.84	1.07	12.46	27.74
09	1.70 in ³ /rev		11.09	10.56	10.06	1.20	13.94	31.09
010	1.94 in ³ /rev		12.60	12.15	11.57	1.20	15.68	35.12
011	2.13 in ³ /rev		13.86	13.41	12.91 ¹⁾	1.34	17.15	36.19 ¹⁾
012	2.50 in ³ /rev		16.24	15.79	15.29 ¹⁾	1.47	19.97	42.22 ¹⁾
014	2.74 in ³ /rev		17.83	17.38	16.88 ¹⁾	1.60	21.84	46.24 ¹⁾
015	3.05 in ³ /rev		19.81	19.36	18.91 ²⁾	1.74	24.26	47.85 ²⁾

1) 11 - 12 - 14 = 4350 PSI max. int. 2) 15 = 4000 PSI max. int.
 - Not to use because internal leakage greater than 50% theoretical flow.
 - Port connection can be furnished with metric threads.

High Pressure Single Vane Pump

HT7D/HT7DS Series

Specification

HT7D for Single pump

Size	Displacement cm³/r 1(in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight		
014	47.6 (2.90)	300 (4350)	250 (3600)	600	3000	27.0 (59.4)		
017	58.2 (3.55)							
020	66.0 (4.03)							
022	70.0 (4.27)							
024	79.5 (4.85)							
028	89.7 (5.47)							
031	98.3 (6.00)	280 (4060)						
035	111.0 (6.77)							
038	120.3 (7.34)							
042	136.0 (8.30)	260 (3770)	235 (3400)				2500	
045	145.7 (8.89)	240 (3500)	206 (3000)				2200	
050	158.0 (9.64)	206 (3000)	160 (2300)					

High Pressure Single Vane Pump

HT7D/HT7DS Series

Ordering Code : Single Pump

HT7DS - 014 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1. Model :

Industrial - HT7D ISO 2 bolts 3019-2 mounting flange
125 A2 HW

- HT7DS SAE C 2 bolts mounting flange
J744

6. Design letter

7. Port Connection (4 bolts SAE flange J518C)

00 - UNC Port Connection (Except HT7D)
M0 - Metric Port Connection

8. Modifications

2. Displacement

Volumetric displacement cm³/rec (in³/rev)

014 - 47.6 (2.90)
017 - 58.2 (3.55)
020 - 66.0 (4.03)
022 - 70.0 (4.27)
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. Type of shaft

HT7D, HT7DS

5 - ISO 3019-G38M Keyed Shaft

HT7DS

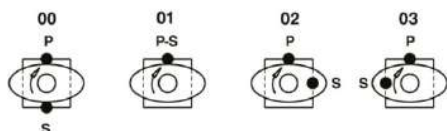
1 - SAE C Keyed Shaft
2 - non SAE Keyed Shaft
3 - SAE C Splined Shaft
4 - non SAE Splined Shaft

4. Direction of rotation (Viewed from shaft end)

R - Turn right
L - Turn left

5. Porting combination

00 - standard

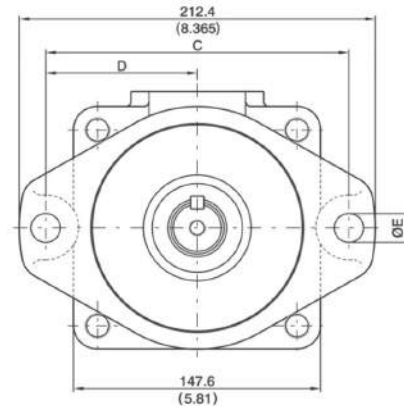
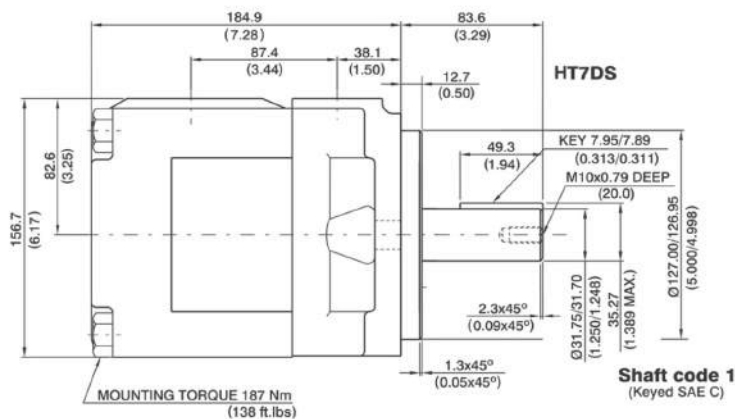
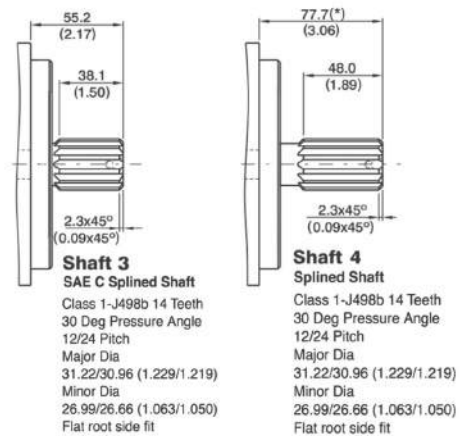
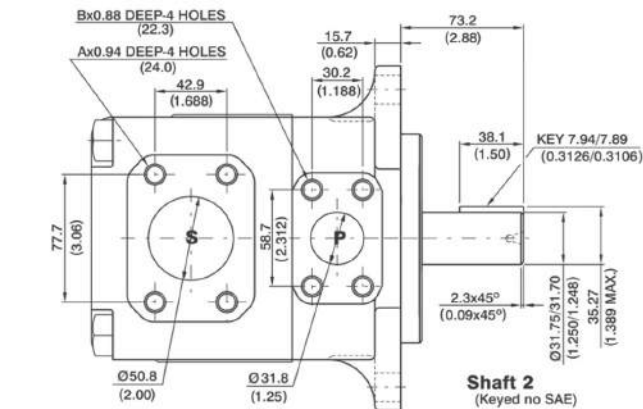


S - Suction port P - Pressure port

High Pressure Single Vane Pump HT7D/HT7DS Series

Installation Dimension mm (inch)

HT7D, HT7DS



Model	HT7DS		HT7D	
Code	00	M0	Y0 ¹⁾	M0
A	1/2 -13 UNC	M12	M12	M12
B	7/16 - 14 UNC	M12	M10	M12
C	181.0 (7.12)		180.0 (7.09)	
D	90.5 (3.56)		90.0 (3.54)	
E	17.5 (0.69)		18.0 (0.71)	

1) 250 bar (3630 psi) max. int

High Pressure Single Vane Pump

HT7D/HT7DS Series

Performance Characteristics

HT7D, HT7DS

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Speed n [R.P.M]	Flow Q [GPM]			Input power P [HP]		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 100 PSI	p = 2000 PSI	p = 3500 PSI
14	2.68 in ³ /rev	1800	20.92	19.18	17.19	3.46	27.77	58.49
17	3.36 in ³ /rev		26.16	24.41	22.42	3.77	33.88	71.92
20	4.03 in ³ /rev		31.39	29.64	27.65	4.07	39.98	85.35
22	4.29 in ³ /rev		33.43	31.69	29.70	4.19	42.37	90.60
24	4.95 in ³ /rev		38.57	36.82	34.83	4.49	48.36	103.78
28	5.49 in ³ /rev		42.80	41.06	39.06	4.74	53.30	114.65
31	6.05 in ³ /rev		47.18	45.43	43.44	4.99	58.41	125.88
35	6.92 in ³ /rev		53.93	52.18	50.44 ¹⁾	5.39	66.29	130.39 ¹⁾
38	7.36 in ³ /rev		57.35	55.61	53.87 ¹⁾	5.59	70.28	138.38 ¹⁾
42	8.39 in ³ /rev		65.39	63.65	62.15 ²⁾	6.05	79.66	149.39 ²⁾
45	8.89 in ³ /rev		69.29	67.11	65.47 ³⁾	6.74	83.75	144.41 ³⁾
50	9.64 in ³ /rev		75.14	72.96	71.78 ⁴⁾	7.08	90.58	134.54 ⁴⁾

1) 35 - 38 = 4060 PSI max. int.

2) 42 = 3770 PSI max. int.

3) 45 = 3500 PSI max. int.

4) 50 = 3000 PSI max. int.

*Special 2"½ (2.5 dia) suction also available

High Pressure Single Vane Pump

HT7E/HT7ES Series

Specification

HT7E, HT7ES for Single pump

Size	Displacement cm ³ /r 1(in ³ /r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Min. Speed rpm	Max. Speed rpm	Weight
042	132.3 (8.07)	240 (3500)	206 (3000)	600	2200	43.0 (94.6)
045	142.4 (8.70)					
050	158.5 (9.67)					
052	164.8 (10.00)					
054	173.8 (10.60)					
057	180.7 (11.02)					
062	196.7 (12.00)					
066	213.3 (13.00)					
072	227.1 (13.86)	90 (1300)	75 (1100)		2000	
085	269.8 (16.40)					

High Pressure Single Vane Pump

HT7E/HT7ES Series

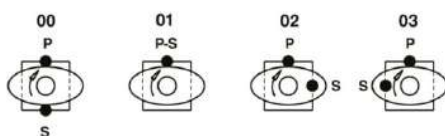
Ordering Code : Single Pump

HT7ES - 042 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1. Model :
Industrial - HT7E ISO 2 bolts 3019-2 mounting flange 125 A2 HW
- HT7ES SAE C 2 bolts mounting flange J744
2. Displacement
Volumetric displacement cm³/rec (in³/rev)
042 - 132.3 (8.07)
045 - 142.4 (8.70)
050 - 158.5 (9.67)
052 - 164.8 (10.00)
054 - 173.8 (10.60)
057 - 180.7 (11.02)
062 - 196.7 (12.00)
066 - 213.3 (13.00)
072 - 227.1 (13.86)
085 - 269.8 (16.40)
3. Type of shaft
HT7E, HT7ES
5 - ISO R775-G38M Keyed Shaft

HT7ES
1 - SAE CC Keyed Shaft
2 - non SAE Keyed Shaft
3 - SAE C Splined Shaft
4 - SAE CC Splined Shaft
4. Direction of rotation (Viewed from shaft end)
R - Turn right
L - Turn left
5. Porting combination
00 - standard
6. Design letter
7. Port Connection (4 bolts SAE flange J518C)
00 - UNC Port Connection (Except HT7E)
M0 - Metric Port Connection
8. Modifications



S - Suction port P - Pressure port

High Pressure Single Vane Pump

HT7E/HT7ES Series

Performance Characteristics

HT7E, HT7ES

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Speed n [R.P.M]	Flow Q [GPM]			Input power P [HP]		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 100 PSI	p = 2000 PSI	p = 3500 PSI
042	8.07 in ³ /rev	1800	62.92	60.37	58.52	8.09	78.44	133.80
045	8.70 in ³ /rev		67.72	65.17	63.32	8.37	84.04	143.60
050	9.67 in ³ /rev		75.38	72.83	70.98	8.82	92.97	159.24
052	10.00 in ³ /rev		78.37	75.82	73.97	8.99	96.47	165.36
054	10.43 in ³ /rev		81.27	78.72	76.87	9.17	99.75	177.46
057	11.18 in ³ /rev		87.12	84.57	82.72	9.51	106.57	189.84
062	12.00 in ³ /rev		93.54	90.99	89.14	9.88	114.17	196.34
066	13.00 in ³ /rev		101.44	98.89	97.04	10.34	123.38	212.46
072	13.86 in ³ /rev		108.00	105.45	103.60	10.72	131.04	225.86
085	16.40 in ³ /rev		127.79	126.13 ¹⁾	-	11.88	101.66 ¹⁾	-

1) 85 = 1300 PSI max. int.

*Special 3"½ (3.5 dia) suction also available

HOF Hydraulic represented by

Flowlution Co.,Ltd.

26/48 Moo4 Suksavadh Road, Jomthong, 10150 Bangkok, Thailand
Tel: +662 877 3223 Fax: +662 877 3373 info@flowlution.com

HOF Corindus Co.,Ltd. (Thailand only)

891 Rama3 Road, Bangpongpan, Yannawa, 10120 Bangkok
Tel: 02 284 1100 Fax: 02 683 4414 info@hofcorindus.co.th
www.hofcorindus.co.th