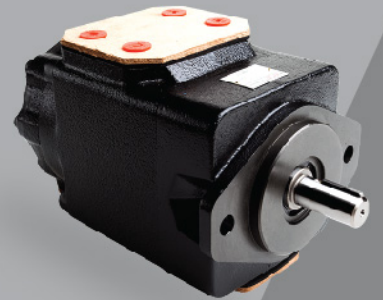




Variable Speed Single & Double Vane Pump

Catalog 2021

Variable Speed Single Vane Pump

HT7B/HT7BS Series

Specification

HT7B, HT7BS for Single pump

Size	Displacement cm³/r 1(in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Max. Speed rpm	Weight
E03	9.8 (0.59)	320 (4640)	290 (4200)	3600	23.5 (51.8)
E04	12.8 (0.78)				
E05	15.9 (0.97)				
E06	19.8 (1.20)				
E07	22.5 (1.37)				
E08	24.9 (1.51)				
E09	28.0 (1.70)				
E10	31.8 (1.94)				
E11	35.0 (2.13)	300 (4350)	275 (4000)	3400	
E12	41.0 (2.50)			3000	
E14	45.0 (2.74)				
E15	50.0 (3.05)	280 (4060)	240 (3500)	3000	

Variable Speed Single Vane Pump

HT7B/HT7BS Series

Ordering Code : Single Pump

HT7BS - E03 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
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1. Model :

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

6. Design letter

- 7. Port Connection (4 bolts SAE flange J518C)
 - 00 - UNC Port Connection (Except HT7B)
 - M0 - Metric Port Connection

2. Displacement

Volumetric displacement cm³/rec (in³/rev)

- E03 - 9.8 (0.60)
- E04 - 12.8 (0.78)
- E05 - 15.9 (0.97)
- E06 - 19.8 (1.20)
- E07 - 22.5 (1.37)
- E08 - 24.9 (1.51)
- E09 - 28.0 (1.70)
- E10 - 31.8 (1.92)
- E11 - 35.0 (2.14)
- E12 - 41.0 (2.47)
- E14 - 45.0 (2.70)
- E15 - 50.0 (3.01)

8. Modifications

3. Type of shaft

HT7B

- 2 - ISO R775-G38M Keyed Shaft

HT7BS

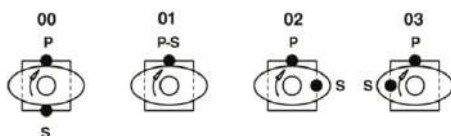
- 1 - SAE B Keyed Shaft
- 3 - SAE B Splined Shaft
- 4 - SAE BB Splined Shaft

4. Direction of rotation (Viewed from shaft end)

- R - Turn right
- L - Turn left

5. Porting combination

- 00 - standard

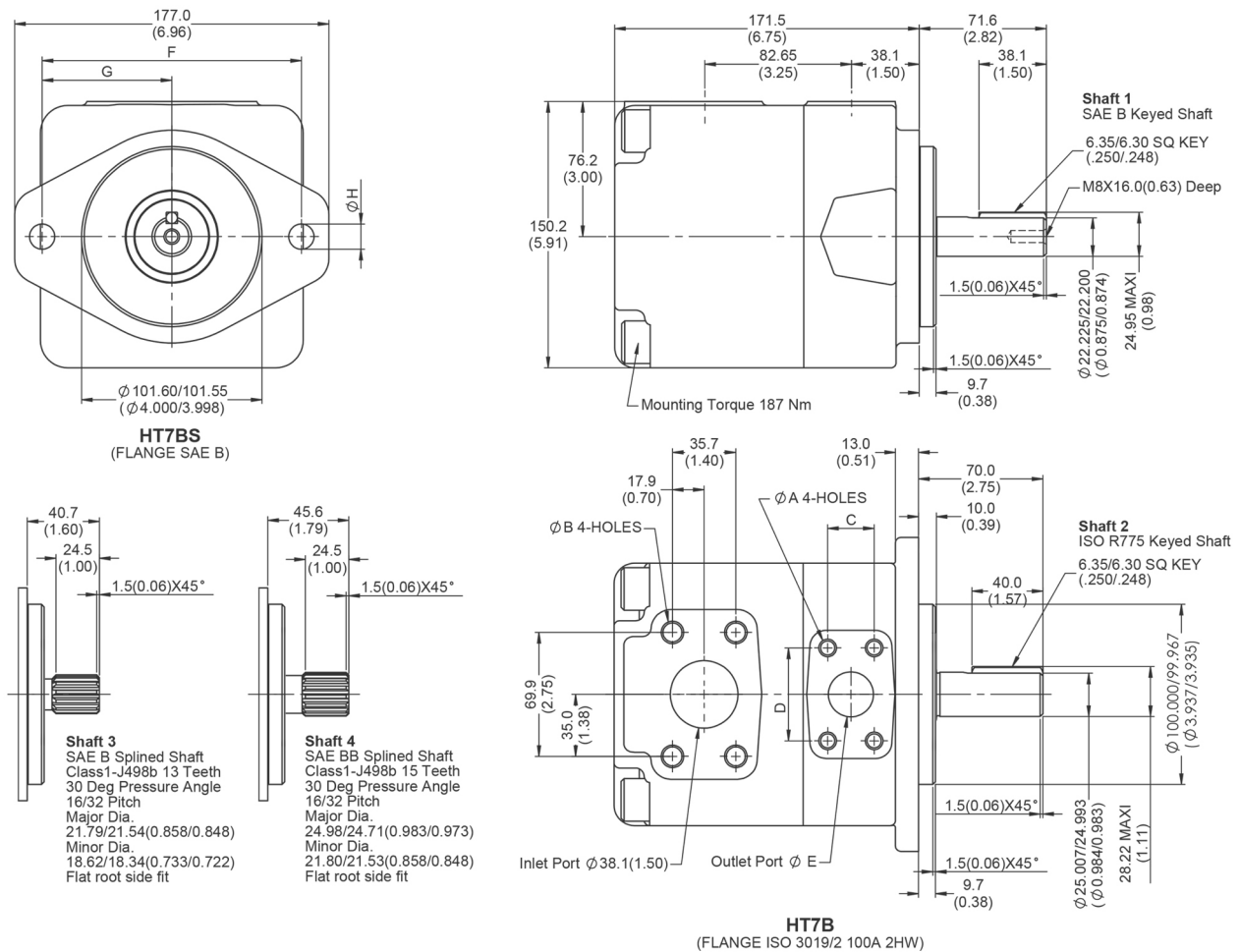


S - Suction port P - Pressure port

Variable Speed Single Vane Pump HT7B/HT7BS Series

Installation Dimension mm (inch)

HT7B, HT7BS



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	Vi x p max.
1	16500
2	20600
3	
4	

Variable Speed Single Vane Pump

HT7B/HT7BS Series

Performance Characteristics

HT7B, HT7BS

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

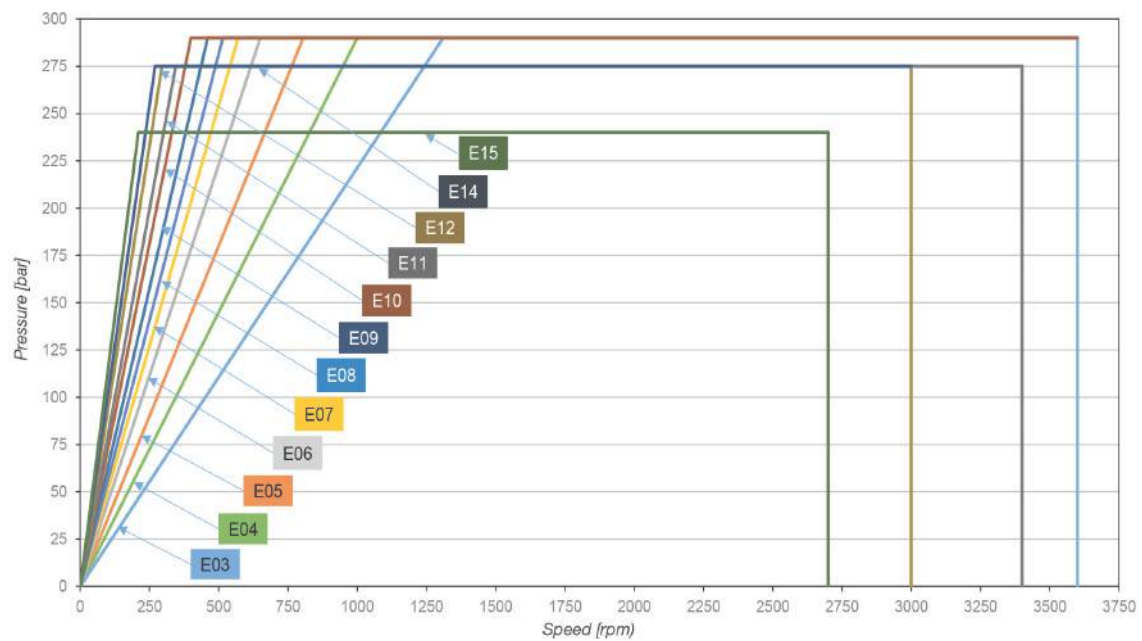
Series	Volumetric Displacement	Flow Q (GPM) & n = 1500 RPM			Input power P (HP) & n = 1500 RPM		
		p = 0 PSI	p = 2000 PSI	p = 4650 PSI	p = 0 PSI	p = 2000 PSI	p = 4650 PSI
E03	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
E04	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
E05	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
E06	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
E07	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
E08	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
E09	1.70 in ³ /rev	11.09	10.56	10.06	1.20	13.94	31.09
E10	1.94 in ³ /rev	12.60	12.15	11.57	1.20	15.68	35.12
E11	2.13 in ³ /rev	13.86	13.41	12.91 ¹⁾	1.34	17.15	36.19 ¹⁾
E12	2.50 in ³ /rev	16.24	15.79	15.29 ¹⁾	1.47	19.97	42.22 ¹⁾
E14	2.74 in ³ /rev	17.83	17.38	16.88 ¹⁾	1.60	21.84	46.24 ¹⁾
E15	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.

Variable Speed Single Vane Pump HT7B/HT7BS Series

Performance Graph

HT7B, HT7BS Operating Range



Variable Speed Single Vane Pump

HT7D/HT7DS Series

Specification

HT7D, HT7DS for Single pump

Size	Displacement cm³/r 1(in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Max. Speed rpm	Weight
E14	47.6 (2.90)	300 (4350)	250 (3600)	3000	27.0 (59.4)
E17	58.2 (3.55)				
E20	66.0 (4.03)				
E22	70.0 (4.27)				
E24	79.5 (4.85)				
E28	89.7 (5.47)				
E31	98.3 (6.00)				
E35	111.0 (6.77)	280 (4060)		2800	
E38	120.3 (7.34)				
E42	136.0 (8.30)	260 (3770)	235 (3400)	2500	

Variable Speed Single Vane Pump

HT7D/HT7DS Series

Ordering Code : Single Pump

HT7DS - E03 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8
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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

2. Displacement

Volumetric displacement cm³/rec (in³/rev)

- E14 - 47.6 (2.90)
- E17 - 58.2 (3.55)
- E20 - 66.0 (4.03)
- E22 - 70.0 (4.27)
- E24 - 79.5 (4.85)
- E28 - 89.7 (5.47)
- E31 - 98.3 (6.00)
- E35 - 111.0 (6.77)
- E38 - 120.3 (7.34)
- E42 - 136.0 (8.30)

8. Modifications

3. Type of shaft

HT7D

- 5 - ISO 3019-G38M Keyed Shaft

HT7DS

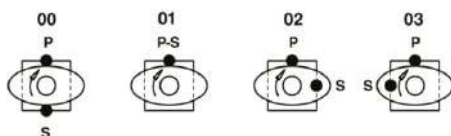
- 1 - SAE C Keyed Shaft
- 3 - SAE C Splined Shaft

4. Direction of rotation (Viewed from shaft end)

- R - Turn right
- L - Turn left

5. Porting combination

- 00 - standard

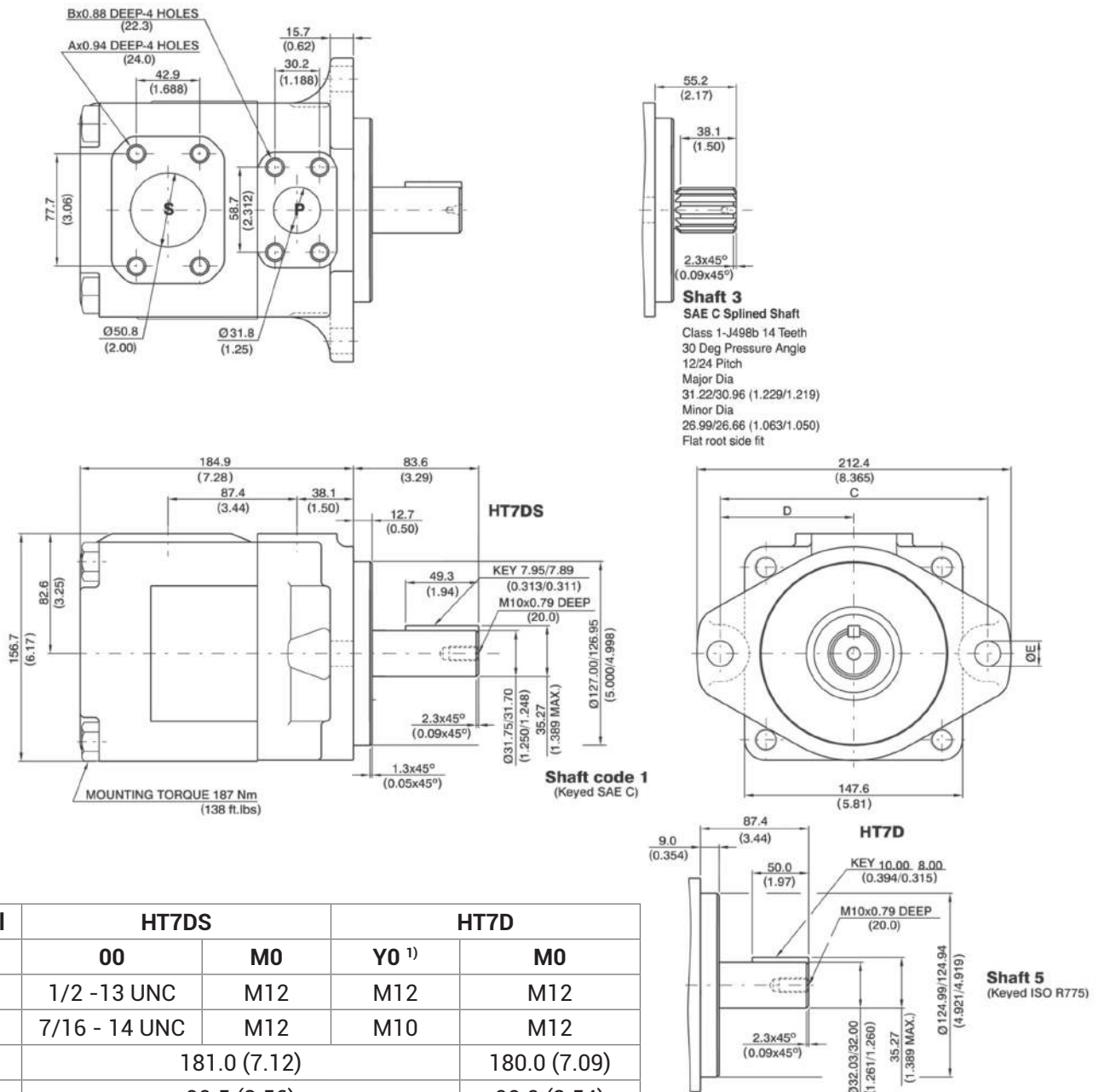


S - Suction port P - Pressure port

Variable Speed 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

Variable Speed Single Vane Pump

HT7D/HT7DS Series

Performance Characteristics

HT7D, HT7DS

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Series	Volumetric Displacement	Flow Q {GPM} & n = 1800 RPM			Input power P {HP} & n = 1800 RPM		
		p = 0 PSI	p = 2000 PSI	p = 4350 PSI	p = 0 PSI	p = 2000 PSI	p = 4350 PSI
E14	2.68 in ³ /rev	20.92	19.18	17.19	3.46	27.77	58.49
E17	3.36 in ³ /rev	26.16	24.41	22.42	3.77	33.88	71.92
E20	4.03 in ³ /rev	31.39	29.64	27.65	4.07	39.98	85.35
E22	4.29 in ³ /rev	33.43	31.69	29.70	4.19	42.37	90.60
E24	4.95 in ³ /rev	38.57	36.82	34.83	4.49	48.36	103.78
E28	5.49 in ³ /rev	42.80	41.06	39.06	4.74	53.30	114.65
E31	6.05 in ³ /rev	47.18	45.43	43.44	4.99	58.41	125.88
E35	6.92 in ³ /rev	53.93	52.18	50.44 ¹⁾	5.39	66.29	130.39 ¹⁾
E38	7.36 in ³ /rev	57.35	55.61	53.87 ¹⁾	5.59	70.28	138.38 ¹⁾
E42	8.39 in ³ /rev	65.39	63.65	62.15 ²⁾	6.05	79.66	149.39 ²⁾

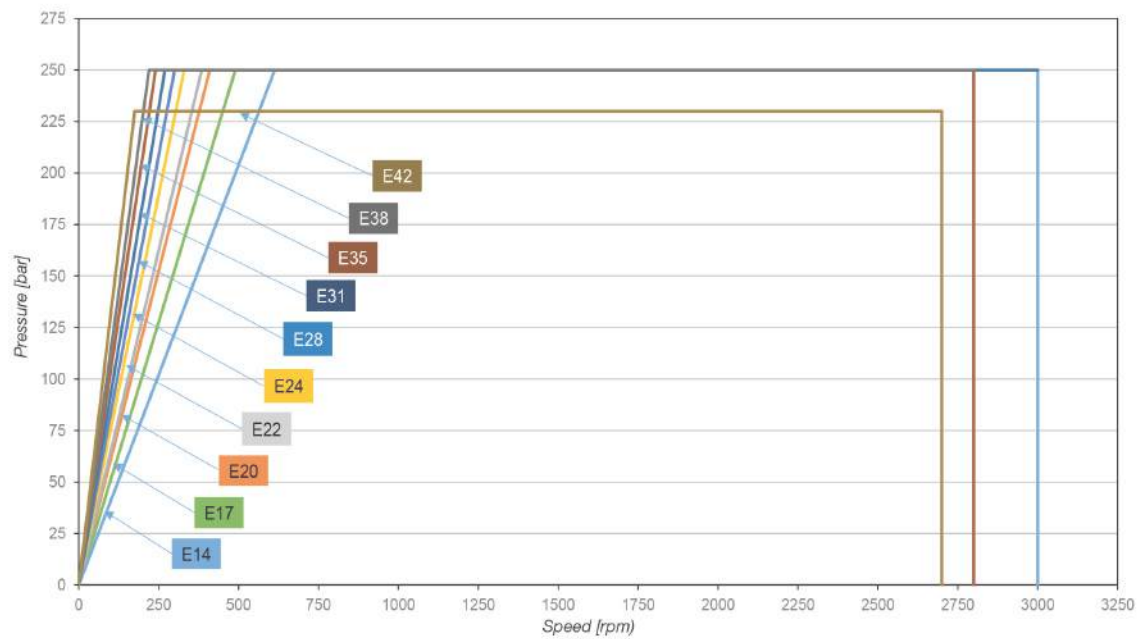
1) 35 - 38 = 4060 PSI max. int. 2) 42 = 3770 PSI max. int.

*Special 2½" (2.5 dia) suction also available

Variable Speed Single Vane Pump HT7D/HT7DS Series

Performance Graph

HT7D, HT7DS Operating Range



Variable Speed Double Vane Pump

HT7BB/HT7BBS Series

Specification

HT7BB, HT7BBS for Double pump

Shaft End Pump				Cover End Pump				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	kg (lb)
E03	9.8 (0.59)	300 (4350)	275 (4000)	E03	9.8 (0.59)	300 (4350)	275 (4000)	3000	32.6 (71.87)
E04	12.8 (0.78)			E04	12.8 (0.78)				
E05	15.9 (0.97)			E05	15.9 (0.97)				
E06	19.8 (1.20)			E06	19.8 (1.20)				
E07	22.5 (1.37)			E07	22.5 (1.37)				
E08	24.9 (1.51)			E08	24.9 (1.51)				
E09	28.0 (1.70)			E09	28.0 (1.70)				
E10	31.8 (1.94)			E10	31.8 (1.94)				
E11	35.0 (2.13)			E11	35.0 (2.13)				
E12	41.0 (2.50)			E12	41.0 (2.50)				
E14	45.0 (2.74)	280 (4060)	240 (3500)	E14	45.0 (2.74)	280 (4060)	240 (3500)	2700	
E15	50.0 (3.05)			E15	50.0 (3.05)				

Variable Speed Double Vane Pump

HT7BB/HT7BBS Series

Ordering Code : Double Pump

HT7BBS - E10 - E03 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8	9
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1. Model :
 - Industrial
 - HT7BB ISO 2 bolts 3019-2 mounting flange 100 A2 HW
 - HT7BBS SAE B 2 bolts mounting flange J744
2. Displacement P1

Volumetric displacement cm³/rec (in³/rev)

 - E03 - 9.8 (0.60)
 - E04 - 12.8 (0.78)
 - E05 - 15.9 (0.97)
 - E06 - 19.8 (1.20)
 - E07 - 22.5 (1.37)
 - E08 - 24.9 (1.51)
 - E09 - 28.0 (1.70)
 - E10 - 31.8 (1.92)
 - E11 - 35.0 (2.14)
 - E12 - 41.0 (2.47)
 - E14 - 45.0 (2.70)
 - E15 - 50.0 (3.01)
3. Displacement P2

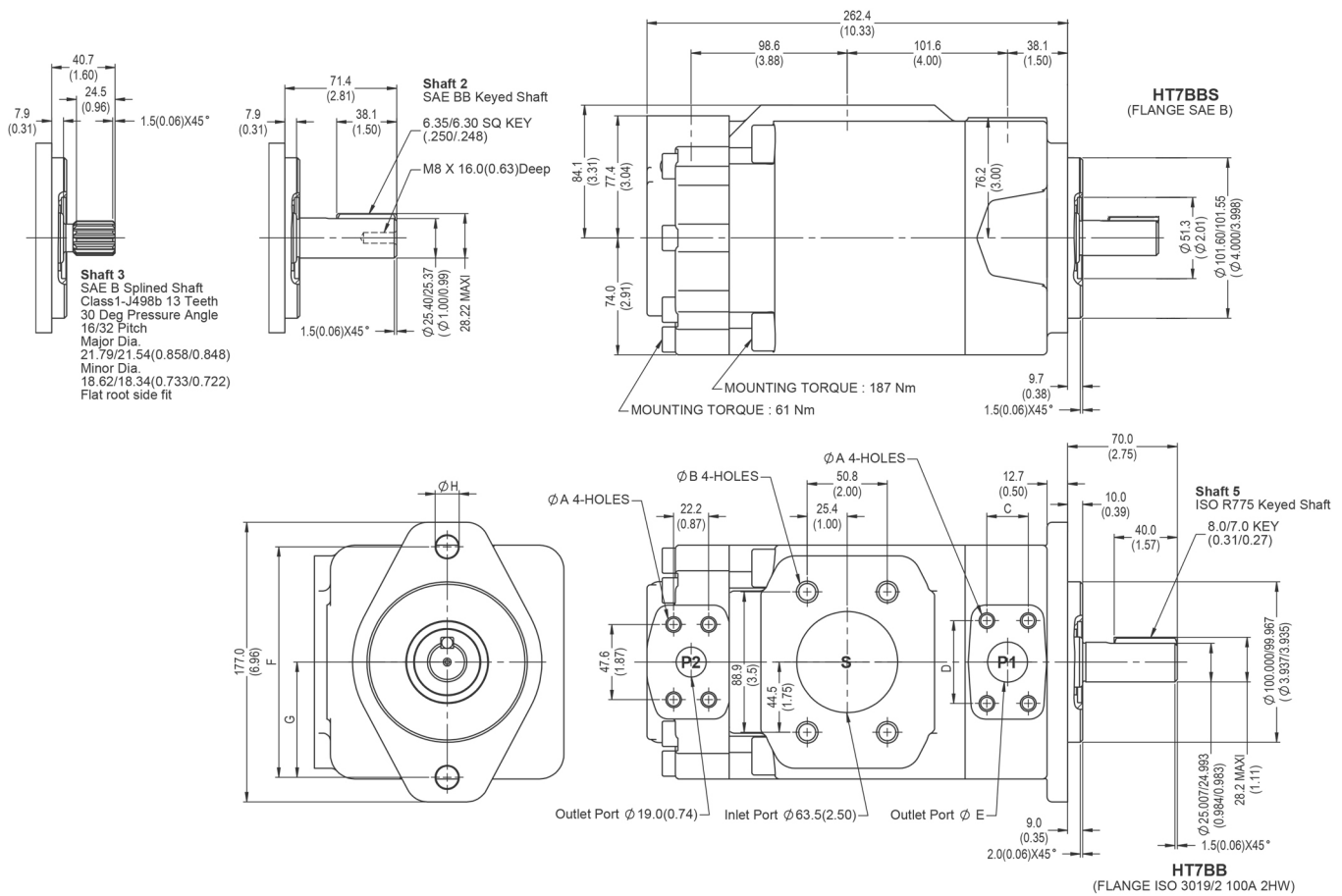
Volumetric displacement cm³/rec (in³/rev)

 - E03 - 9.8 (0.60)
 - E04 - 12.8 (0.78)
 - E05 - 15.9 (0.97)
 - E06 - 19.8 (1.20)
 - E07 - 22.5 (1.37)
 - E08 - 24.9 (1.51)
 - E09 - 28.0 (1.70)
 - E10 - 31.8 (1.92)
 - E11 - 35.0 (2.14)
 - E12 - 41.0 (2.47)
 - E14 - 45.0 (2.70)
 - E15 - 50.0 (3.01)
4. Type of shaft
 - HT7BB
 - 5 - ISO R775-G38M Keyed Shaft
 - HT7BBS
 - 2 - SAE BB Keyed Shaft
 - 3 - SAE B Splined Shaft
5. Direction of rotation (Viewed from shaft end)
 - R - Turn right
 - L - Turn left
6. Porting combination
 - 00 - standard
7. Design letter
8. Port Connection (4 bolts SAE flange J518C)
 - 00 - UNC Port Connection (Except HT7BB)
 - M0 - Metric Port Connection
9. Modifications

Variable Speed Double Vane Pump HT7BB/HT7BBS Series

Installation Dimension mm (inch)

HT7BB, HT7BBS



Model	HT7BB		HT7BBS	
Code	M0	M1	00	01
ϕA	M10 x19.0 DEEP		3/8"-16 UNC x 19.0 DEEP	
ϕB	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
ϕE	25.4	19.1	25.4	19.1
F	140.0		146.0	
G	70.0		73.0	
ϕH	14.0		14.3	

Shaft torque limits [ml/rev. x bar]	
Shaft	Vi x p max.
1	14300
2	21420
3	20600
4	32670
5	25300

Variable Speed Double Vane Pump

HT7BB/HT7BBS Series

Performance Characteristics

HT7BB, HT7BBS

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	E03	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
	E04	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
	E05	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
	E06	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
	E07	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
	E08	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
	E09	1.70 in ³ /rev	11.09	10.56	10.06	1.20	13.94	31.09
	E10	1.94 in ³ /rev	12.60	12.15	11.57	1.20	15.68	35.12
	E11	2.13 in ³ /rev	13.86	13.41	12.91 ¹⁾	1.34	17.15	36.19 ¹⁾
	E12	2.50 in ³ /rev	16.24	15.79	15.29 ¹⁾	1.47	19.97	42.22 ¹⁾
	E14	2.74 in ³ /rev	17.83	17.38	16.88 ¹⁾	1.60	21.84	46.24 ¹⁾
	E15	3.05 in ³ /rev	19.81	19.36	18.91 ²⁾	1.74	24.26	47.85 ²⁾
P2	E03	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
	E04	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
	E05	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
	E06	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
	E07	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
	E08	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
	E09	1.70 in ³ /rev	11.09	10.56	10.06	1.20	13.94	31.09
	E10	1.94 in ³ /rev	12.60	12.15	11.57	1.20	15.68	35.12
	E11	2.13 in ³ /rev	13.86	13.41	12.91 ¹⁾	1.34	17.15	36.19 ¹⁾
	E12	2.50 in ³ /rev	16.24	15.79	15.29 ¹⁾	1.47	19.97	42.22 ¹⁾
	E14	2.74 in ³ /rev	17.83	17.38	16.88 ¹⁾	1.60	21.84	46.24 ¹⁾
	E15	3.05 in ³ /rev	19.81	19.36	18.91 ²⁾	1.74	24.26	47.85 ²⁾

1) 011 - 012 - 014 = 4350 PSI max. int. 3) 015 = 4000 PSI max. int.

- Not to use because internal leakage greater than 50% theoretical flow.

- Port connection can be furnished with metric threads.

Variable Speed Double Vane Pump

HT7DB/HT7DBS Series

Specification

HT7DB, HT7DBS for Double pump

Shaft End Pump				Max. speed	Cover End Pump				Max. speed	Weight
Size	Displacement cm³/r 1 (in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)		Size	Displacement cm³/r 1 (in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)		
E14	47.6 (2.90)	300 (4350)	250 (3600)	3000	E03	9.8 (0.59)	300 (4350)	275 (4000)	3000	38.6 (85.1)
E17	58.2 (3.55)				E04	12.8 (0.78)				
E20	66.0 (4.03)				E05	15.9 (0.97)				
E22	70.0 (4.27)				E06	19.8 (1.20)				
E24	79.5 (4.85)				E07	22.5 (1.37)				
E28	89.7 (5.47)				E08	24.9 (1.51)				
E31	98.3 (6.00)				E09	28.0 (1.70)				
E35	111.0 (6.77)	280 (4060)		2800	E10	31.8 (1.94)				
E38	120.3 (7.34)				E11	35.0 (2.13)				
E42	136.0 (8.30)	260 (3770)	235 (3400)	2500	E12	41.0 (2.50)	280 (4060)	240 (3500)	2700	
					E14	45.0 (2.74)				
					E15	50.0 (3.05)				

Variable Speed Double Vane Pump

HT7DB/HT7DBS Series

Ordering Code : Double Pump

HT7DBS - E14 - E03 - 1 R 00 - A - 00 - ..

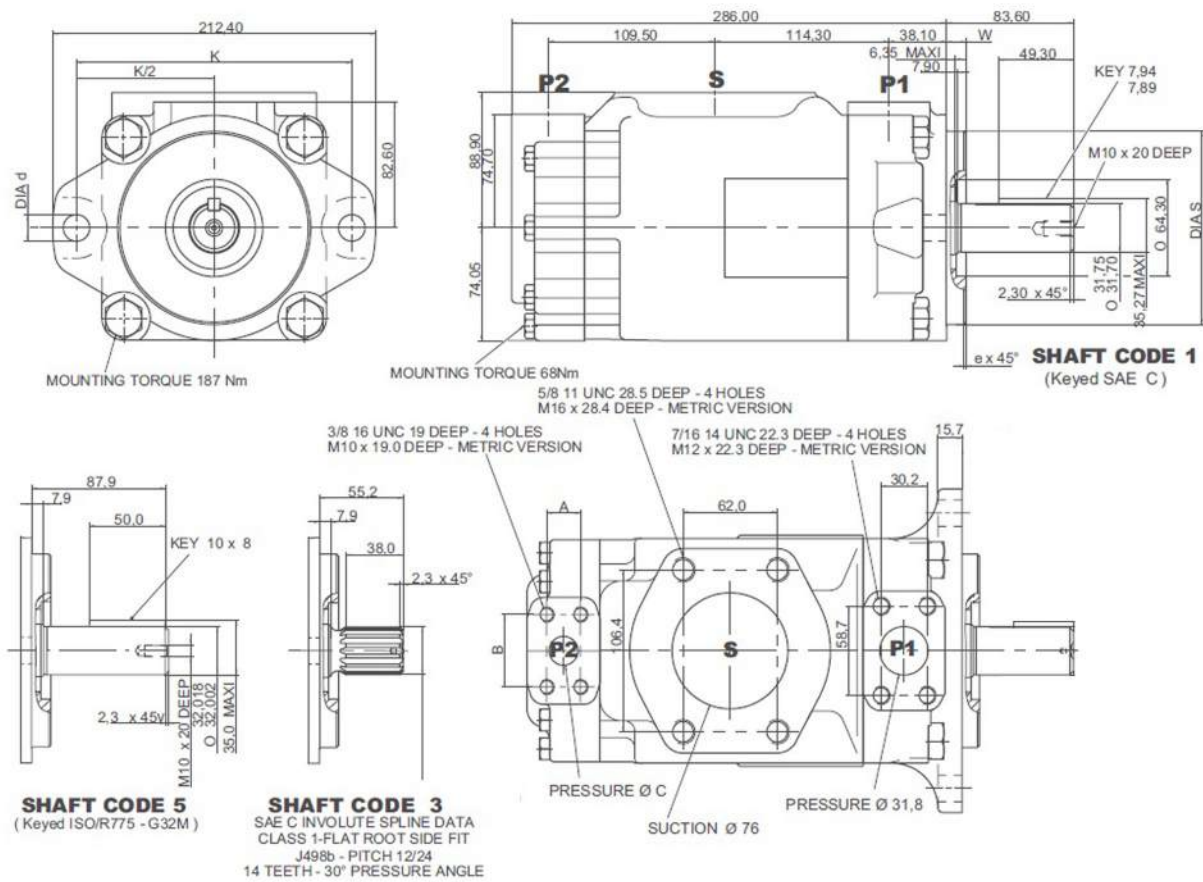
1	2	3	4	5	6	7	8	9
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1. Model :
 - Industrial - HT7DB ISO 2 bolts 3019-2 mounting flange 125 A2 HW
 - HT7DBS SAE C 2 bolts mounting flange J744
2. Displacement P1
 - Volumetric displacement cm³/rec (in³/rev)
 - E14 - 47.6 (2.90)
 - E17 - 58.2 (3.55)
 - E20 - 66.0 (4.03)
 - E22 - 70.0 (4.27)
 - E24 - 79.5 (4.85)
 - E28 - 89.7 (5.47)
 - E31 - 98.3 (6.00)
 - E35 - 111.0 (6.77)
 - E38 - 120.3 (7.34)
 - E42 - 136.0 (8.30)
3. Displacement P2
 - Volumetric displacement cm³/rec (in³/rev)
 - E03 - 9.8 (0.60)
 - E04 - 12.8 (0.78)
 - E05 - 15.9 (0.97)
 - E06 - 19.8 (1.20)
 - E07 - 22.5 (1.37)
 - E08 - 24.9 (1.51)
 - E09 - 28.0 (1.70)
 - E10 - 31.8 (1.92)
 - E11 - 35.0 (2.14)
 - E12 - 41.0 (2.47)
 - E14 - 45.0 (2.70)
 - E15 - 50.0 (3.01)
4. Type of shaft
 - HT7DB
 - 5 - ISO 3019-2-G32M Keyed Shaft
 - HT7DBS
 - 1 - SAE C Keyed Shaft
 - 3 - SAE C 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 (Except HT7DB)
 - M0 - Metric Port Connection
9. Modifications

Variable Speed Double Vane Pump HT7DB/HT7DBS Series

Installation Dimension mm (inch)

HT7DB, HT7DBS



Alternate mounting flange

Model	ØS		ex 45°	W	K	ØD
	MAX.	MIN.				
HT7DB	125.00	124.937	2.0	9.5	180.0	18.0
HT7DBS	127.00	126.950	1.3	12.7	181.0	17.5

Alternate connect. variables

	00 & M0	01 & M1
A	26.20	22.20
B	52.35	47.60
C	25.0	19.0

Variable Speed Double Vane Pump

HT7DB/HT7DBS Series

Performance Characteristics

HT7DB, HT7DBS

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	E14	2.90 in ³ /rev	22.64	20.46	18.82	4.02	29.31	49.34
	E17	3.55 in ³ /rev	27.68	25.50	23.86	4.31	35.20	59.64
	E20	4.00 in ³ /rev	31.39	29.21	27.57	4.53	39.52	67.21
	E22	4.29 in ³ /rev	33.43	31.69	30.32	4.19	42.37	72.57
	E24	4.80 in ³ /rev	37.82	35.63	33.99	4.91	47.02	80.32
	E28	5.50 in ³ /rev	42.66	40.48	38.84	5.19	52.68	90.23
	E31	6.00 in ³ /rev	46.75	44.57	42.93	5.43	57.45	98.58
	E35	6.80 in ³ /rev	52.79	50.61	48.97	5.78	64.50	110.91
	E38	7.30 in ³ /rev	57.21	55.03	53.39	6.04	69.66	119.94
	E42	8.30 in ³ /rev	64.68	62.50	60.86	6.47	78.37	135.19
P2	E03	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
	E04	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
	E05	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
	E06	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
	E07	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
	E08	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
	E09	1.70 in ³ /rev	11.09	10.56	10.06	1.20	13.94	31.09
	E10	1.94 in ³ /rev	12.60	12.15	11.57	1.20	15.68	35.12
	E11	2.13 in ³ /rev	13.86	13.41	12.91 ²⁾	1.34	17.15	36.19 ²⁾
	E12	2.50 in ³ /rev	16.24	15.79	15.29 ²⁾	1.47	19.97	42.22 ²⁾
	E14	2.74 in ³ /rev	17.83	17.38	16.88 ²⁾	1.60	21.84	46.24 ²⁾
	E15	3.05 in ³ /rev	19.81	19.36	18.91 ³⁾	1.74	24.26	47.85 ³⁾

1) 050 = 3000 PSI max. int. 2) 011 - 012 - 014 = 4350 PSI max. int. 3) 015 = 4000 PSI max. int.
 - Not to use because internal leakage greater than 50% theoretical flow.
 - Port connection can be furnished with metric threads.

Variable Speed Double Vane Pump

HT7DD/HT7DDS Series

Specification

HT7DD, HT7DDS for Double pump

Shaft End Pump				Cover End Pump				Max. speed	Weight
Size	Displacement cm³/r 1(in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	Size	Displacement cm³/r 1(in³/r)	Max. Intermittent Pressure bar (psi)	Max. Continuous Pressure bar (psi)	rpm	kg (lb)
E14	47.6 (2.90)	300 (4350)	250 (3600)	E14	47.6 (2.90)	300 (4350)	250 (3600)	3000	56.0 (123.5)
E17	58.2 (3.55)			E17	58.2 (3.55)				
E20	66.0 (4.03)			E20	66.0 (4.03)				
E22	70.0 (4.27)			E22	70.0 (4.27)				
E24	79.5 (4.85)			E24	79.5 (4.85)				
E28	89.7 (5.47)			E28	89.7 (5.47)				
E31	98.3 (6.00)			E31	98.3 (6.00)				
E35	111.0 (6.77)	280 (4060)	235 (3400)	E35	111.0 (6.77)	280 (4060)	2800		
E38	120.3 (7.34)			E38	120.3 (7.34)				
E42	136.0 (8.30)	260 (3770)	235 (3400)	E42	136.0 (8.30)	260 (3770)	235 (3400)	2500	

Variable Speed Double Vane Pump

HT7DD/HT7DDS Series

Ordering Code : Double Pump

HT7DDS - E24 - E17 - 1 R 00 - A - 00 - ..

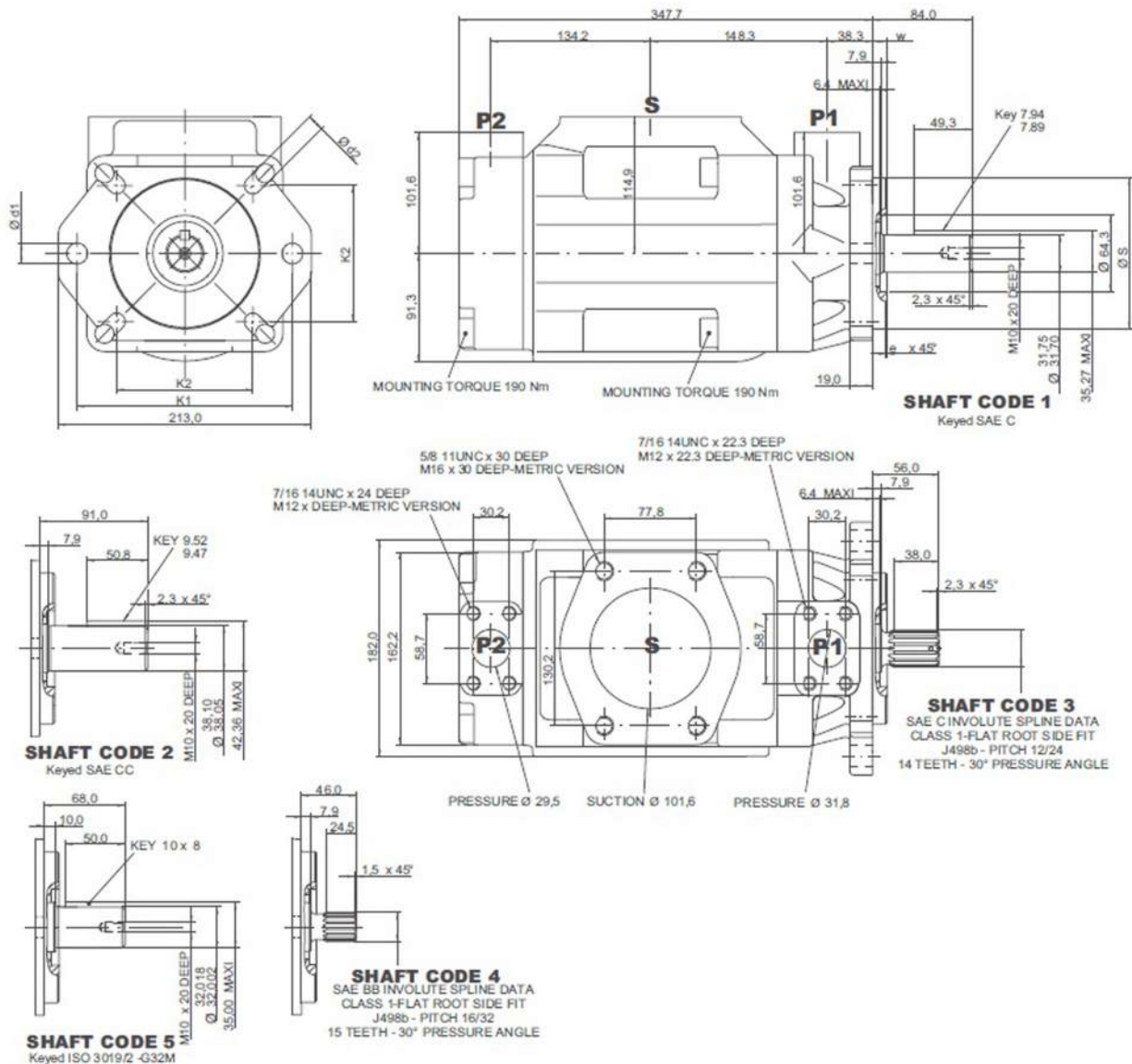
1	2	3	4	5	6	7	8	9
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1. Model :
 - Industrial - HT7DD ISO 6 bolts 3019-2 mounting flange 125-A2-HW or 125 B4 HW
 - HT7DDS SAE C 6 bolts mounting flange J744
2. Displacement P1
Volumetric displacement cm³/rec (in³/rev)
 - E03 - 9.8 (0.60)
 - E04 - 12.8 (0.78)
 - E05 - 15.9 (0.97)
 - E06 - 19.8 (1.20)
 - E07 - 22.5 (1.37)
 - E08 - 24.9 (1.51)
 - E09 - 28.0 (1.70)
 - E10 - 31.8 (1.92)
 - E11 - 35.0 (2.14)
 - E12 - 41.0 (2.47)
 - E14 - 45.0 (2.70)
 - E15 - 50.0 (3.01)
3. Displacement P2
Volumetric displacement cm³/rec (in³/rev)
 - E03 - 9.8 (0.60)
 - E04 - 12.8 (0.78)
 - E05 - 15.9 (0.97)
 - E06 - 19.8 (1.20)
 - E07 - 22.5 (1.37)
 - E08 - 24.9 (1.51)
 - E09 - 28.0 (1.70)
 - E10 - 31.8 (1.92)
 - E11 - 35.0 (2.14)
 - E12 - 41.0 (2.47)
 - E14 - 45.0 (2.70)
 - E15 - 50.0 (3.01)
4. Type of shaft
 - HT7DD
 - 5 - ISO 3019-2-G32M Keyed Shaft
 - HT7DDS
 - 1 - SAE C Keyed Shaft
 - 2 - SAE CC Keyed Shaft
 - 3 - SAE C Splined Shaft
 - 4 - SAE BB 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 (Except HT7DD)
 - M0 - Metric Port Connection
9. Modifications

Variable Speed Double Vane Pump HT7DD/HT7DDS Series

Installation Dimension mm (inch)

HT7DD, HT7DDS



Alternate mounting flange								
Model	ØS		ex 45°	W	K1	Ød1	K2	Ød2
	MAX.	MIN.						
HT7DD	125.00	124.937	2.0	9.5	180.0	18.0	113.14	14.0
HT7DDS	127.00	126.950	1.3	12.7	181.0	17.5	114.50	14.3

Variable Speed Double Vane Pump

HT7DD/HT7DDS Series

Performance Characteristics

HT7DD, HT7DDS

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

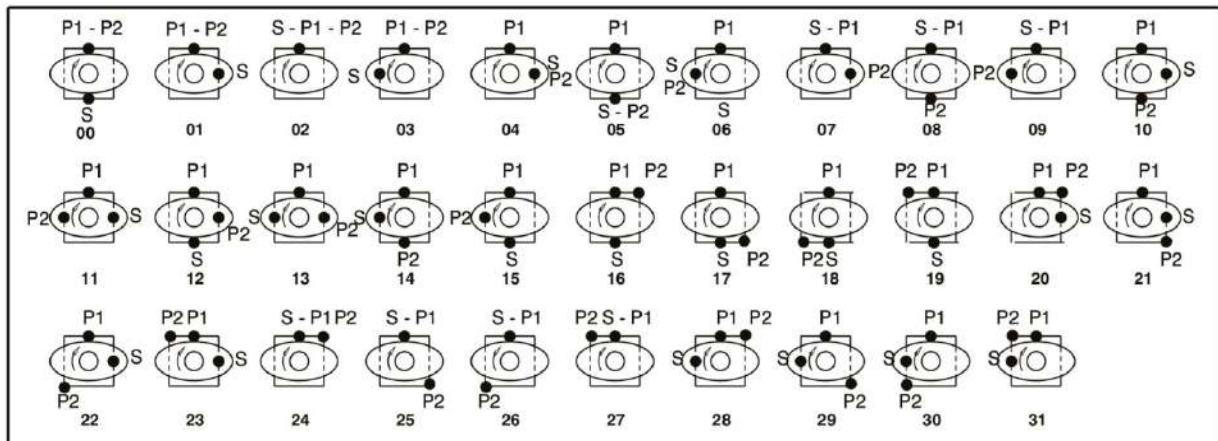
Pressure port	Series	Volumetric Displacement	Flow Q {GPM} & n = 1800 RPM			Input power P {HP} & n = 1800 RPM		
			p = 0 PSI	p = 2000 PSI	p = 3500 PSI	p = 0 PSI	p = 2000 PSI	p = 3500 PSI
P1	E14	2.90 in ³ /rev	22.64	20.46	18.82	4.02	29.31	49.34
	E17	3.55 in ³ /rev	27.68	25.50	23.86	4.31	35.20	59.64
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	E42	8.30 in ³ /rev	64.68	62.50	60.86	6.47	78.37	135.19

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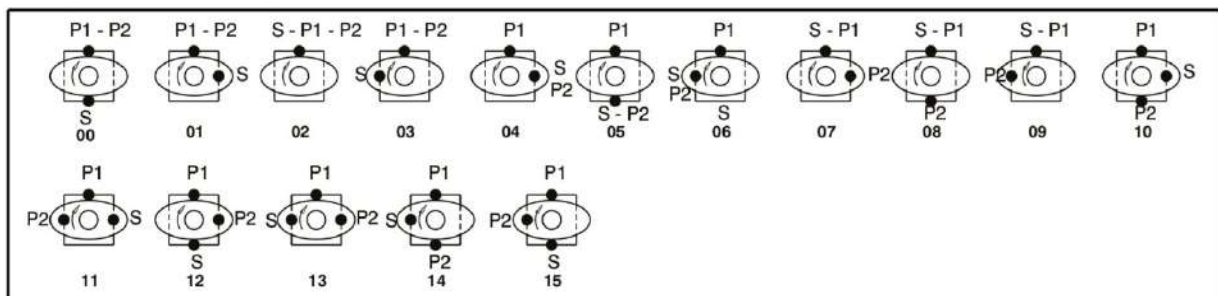
- Port connection can be furnished with metric threads.

Variable Speed Double Vane Pump HT7 Series - Porting Diagram

Porting Diagrams



HT7BB/HT7BBS, HT7DB/HT7DBS



HT7DD/HT7DDS

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