



Hydraulic Double Vane Pump HT6 HT67 & HT7 Series

Catalogue 2025



BUREAU
VERITAS

Bureau Veritas Certification

FLO-TECH ENGINEERING CO., LTD.

47 SOI SUKSAWAD 14/18 JOMTONG, JOMTONG, BANGKOK 10150 THAILAND

Bureau Veritas Certification Holding SAS - UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification

**DESIGN & DEVELOP, PRODUCTION AND TRADING OF HYDRAULIC PUMP,
HYDRAULIC MOTOR, HYDRAULIC VALVE, PNEUMATIC VALVE,
POWER UNIT AND HYDRAULIC ACCESSORIES**

Original cycle start date:	17 March 2009
Expiry date of previous cycle:	NA
Certification / Recertification Audit date:	NA
Certification / Recertification cycle start date:	16 March 2024
Subject to the continued satisfactory operation of the organisation's Management System, this certificate expires on:	16 March 2027

Certificate No.: TH022197

Version: 1

Issue date: 16 March 2024



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Signed on behalf of BVCH SAS UK Branch

Certification Body Address: 5th Floor, 66 Prescot Street, London, E1 8HG, United Kingdom

Local Office: Bureau Veritas Certification (Thailand) Ltd. 16th Floor, Bangkok Tower, 2170 New Petchburi Road, Bangkapi, Huaykwang, Bangkok 10310, Thailand

Further clarifications regarding the scope and validity of this certificate, and the applicability of the management system requirements, please call: 66 2 670 4800



HOF Hydraulic Solutions Warranty Policy

Warranty

Flowlution Co.,Ltd, sole distributor of "HOF Hydraulic Solutions", Warrants all of its products to be free from defects in material and workmanship under normal operating conditions and proper application in accordance with the specifications for operation as described by the manufacturer for the period of twelve (12) months in service.

Limitations on Warranty

This Warranty is expressly in lieu of any other warranties expressed or implied. Buyer's sole and exclusive remedy under this Warranty shall be limited to the repair, replacement or exchange of warranted products at our option, F.O.B. our factory, or designated service center.

No special, incidental, consequential or other damage shall be recoverable. Flowlution Co.,Ltd shall not be liable for consequential damages or contingent liabilities including, but not limited to, loss of life, personal injury, loss of crops, loss due to fire or water damage, loss of business or business income, down time costs and trade or other commercial loss arising out of the failure of the product. Flowlution Co.,Ltd will in no event be liable for any sum in excess of the price received by it for the product for which liability is claimed or asserted.

No product shall be returned without prior authorization from Flowlution Co.,Ltd. Buyers and their agents shall prepay all transportation charges for the return of such products to Flowlution Co.,Ltd's factory or designated service center. There will be no acceptance of any charges for labor and/or parts incidental to the removal or remounting of product repaired or replaced under this Warranty.

The above Warranty does not cover conditions over which Flowlution Co.,Ltd has no control, including, without limitation, contamination, pressures in excess of recommended maximum, products damaged or subject to accident abuse or misuse after shipment from our factory, products altered or repaired by anyone other than Flowlution Co.,Ltd personnel, authorized Flowlution Co.,Ltd factory personnel or persons so designated in writing by Flowlution Co.,Ltd prior to commencement of said work.

A return goods authorization number must be obtained from Flowlution Co.,Ltd or Flowlution Co.,Ltd's authorized Service center, or Flowlution Co.,Ltd's authorized agent prior to any products being returned for Warranty.

For more details please contact info@flowlution.com or contact@hofhydraulic.com



High Pressure Double Vane Pump HT7BB/ HT7BBS Series

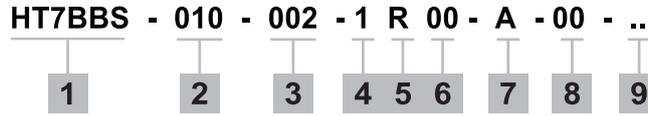
Specification

HT7BB, HT7BBS for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
002	5.8 (0.35)	320 (4640)	290 (4200)	002	5.8 (0.35)	320 (4640)	290 (4200)	600	2200	32.6 (71.87)
003	9.8 (0.59)			003	9.8 (0.59)					
004	12.8 (0.78)			004	12.8 (0.78)					
005	15.9 (0.97)			005	15.9 (0.97)					
006	19.8 (1.20)			006	19.8 (1.20)					
007	22.5 (1.37)			007	22.5 (1.37)					
008	24.9 (1.51)			008	24.9 (1.51)					
009	26.0 (1.70)			009	26.0 (1.70)					
010	31.8 (1.94)			010	31.8 (1.94)					
011	35.0 (2.13)			011	35.0 (2.13)					
012	41.0 (2.50)			012	41.0 (2.50)					
014	45.0 (2.74)			014	45.0 (2.74)					
015	50.0 (3.05)	280 (4060)	240 (3500)	015	50.0 (3.05)	280 (4060)	240 (3500)			

High Pressure Double Vane Pump HT7BB/ HT7BBS Series

Ordering Code : Double Pump



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)
- 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. Displacement P2

- 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)

4. Type of shaft

- HT7BB, HT7BBS
- 5 - ISO R775-G38M Keyed Shaft
- HT7BBS
- 1 - non SAE Keyed Shaft
- 2 - SAE BB Keyed Shaft
- 3 - SAE B 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 HT7BB)
- M0 - Metric Port Connection

Code		4 bolt SAE flanges		
UNC	Metric	P1	P2	S
00	M0	1"	3/4"	2½"
01	M1	3/4"	3/4"	2½"

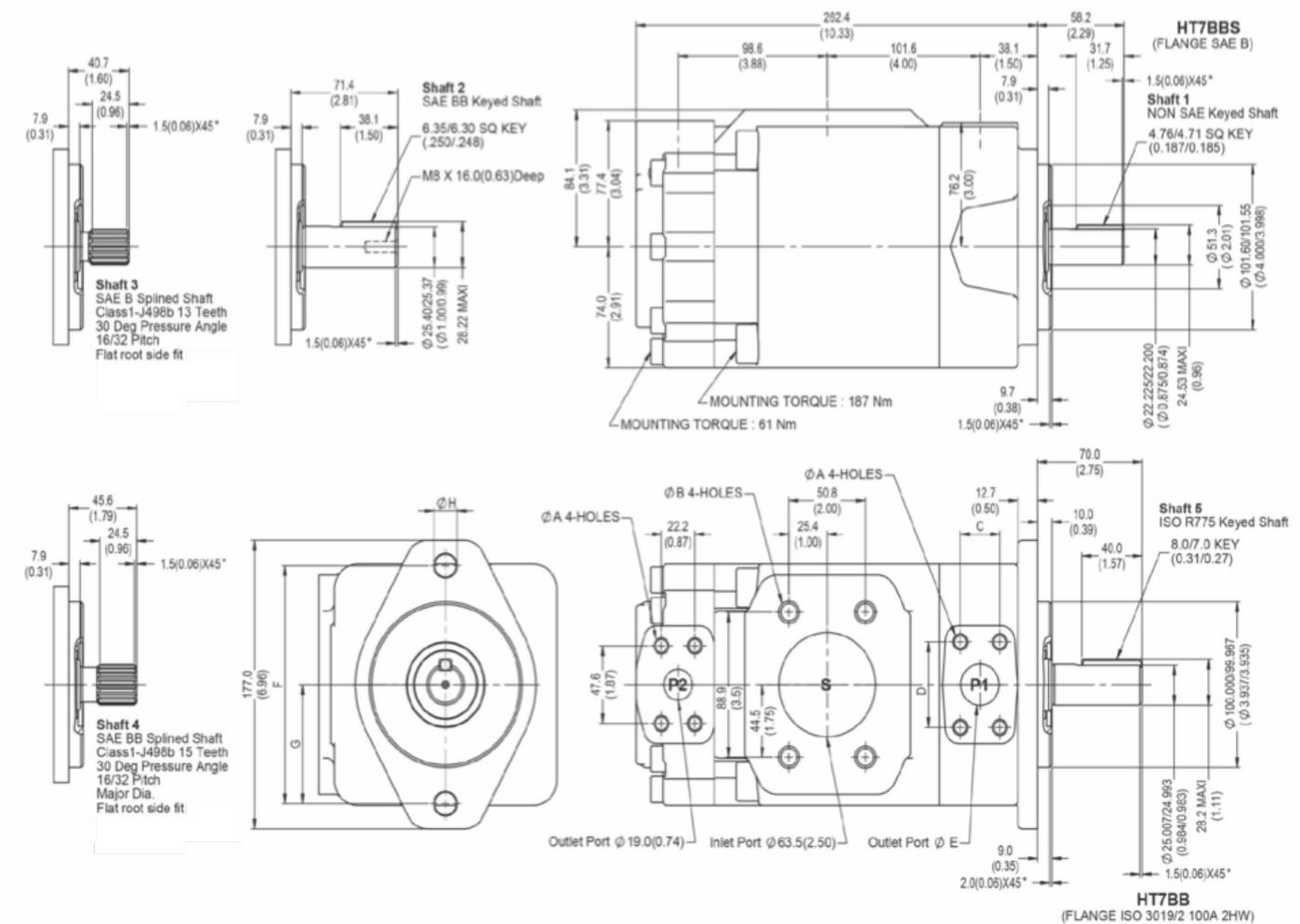
9. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT7BB/ HT7BBS Series

Installation Dimension mm (inch)

HT7BB, HT7BBS



Model	HT7BB		HT7BBS	
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	14300
2	21420
3	20600
4	32670
5	25300

High Pressure 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 & P2	002	0.35 in ³ /rev	2.29	1.84	1.26	0.67	3.48	7.23
	003	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
	004	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
	005	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
	006	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
	007	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
	008	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
	009	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) 011 - 012 - 014 = 4350 PSI max. int. 2) 015 = 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 Double Vane Pump HT67CB/ HT67CBW Series

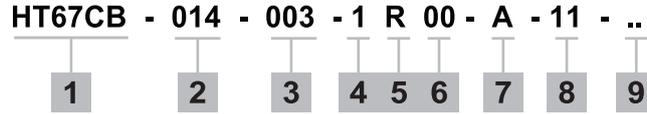
Specification

HT67CB, HT67CBW for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
003	10.8 (0.66)	275 (4000)	240 (3500)	002	5.8 (0.35)	300 (4350)	275 (4000)	600	2200	27.0 (59.4)
005	17.2 (1.05)			003	9.8 (0.59)					
006	21.3 (1.30)			004	12.8 (0.78)					
008	26.4 (1.61)			005	15.9 (0.97)					
010	34.1 (2.08)			006	19.8 (1.20)					
012	37.1 (2.26)			007	22.5 (1.37)					
014	46.0 (2.81)			008	24.9 (1.51)					
017	58.3 (3.56)			009	28.0 (1.70)					
020	63.8 (3.89)			010	31.8 (1.94)					
022	70.3 (4.29)			011	35.0 (2.13)					
025	79.3 (4.84)			012	41.0 (2.50)					
028	88.8 (5.42)	206 (3000)	160 (2300)	014	45.0 (2.74)	280 (4060)	240 (3500)			
031	100.0 (6.10)			015	50.0 (3.05)					

High Pressure Double Vane Pump HT67CB/ HT67CBW Series

Ordering Code : Double Pump

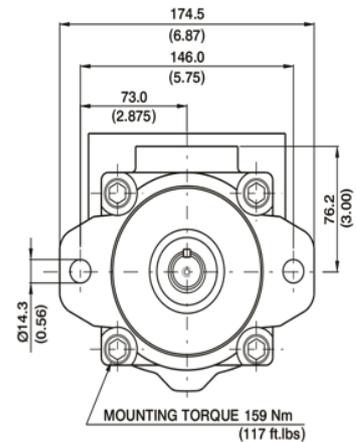
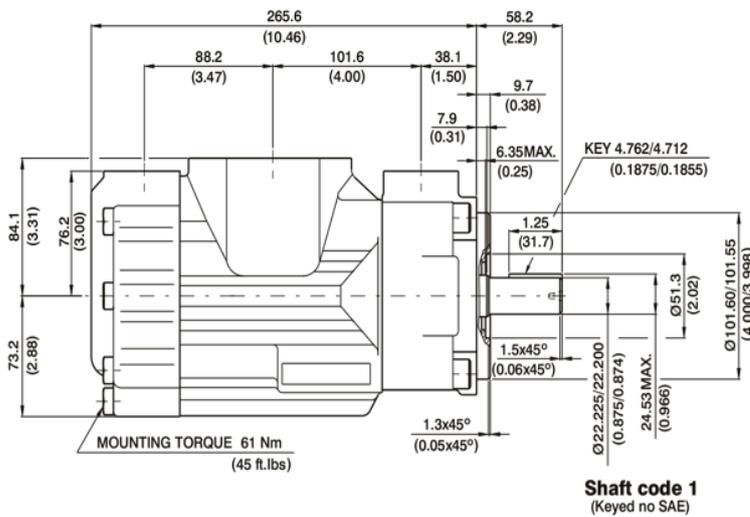
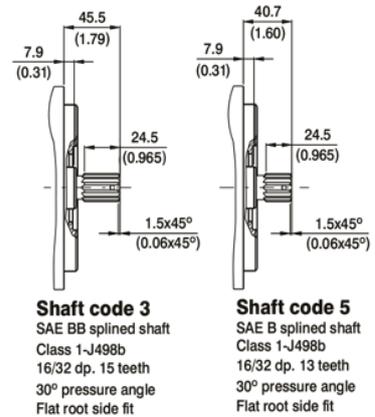
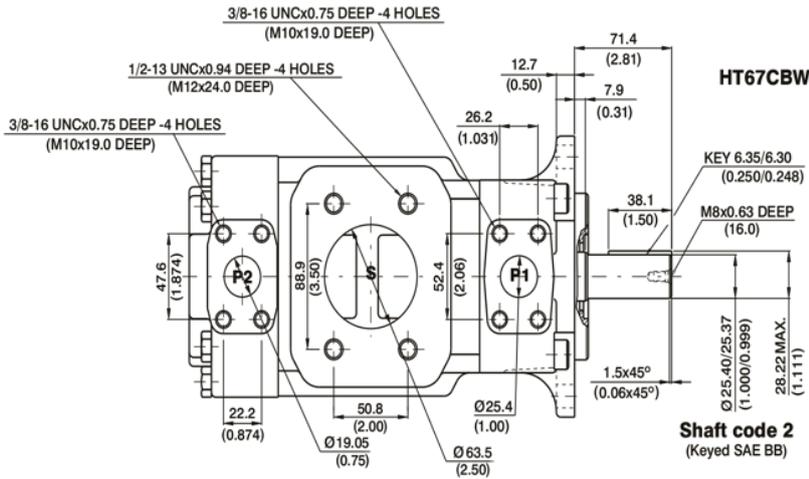


- | | |
|--|---|
| <p>1. Model :</p> <p>Industrial - HT67CB
Severe Duty Shaft (W) - HT67CBW
SAE B 2 bolts mounting flange J744</p> <p>2. Displacement P1
Volumetric displacement cm³/rec (in³/rev)</p> <p>6C</p> <p>003 - 10.8 (0.66)
005 - 17.2 (1.05)
006 - 21.3 (1.30)
008 - 26.4 (1.61)
010 - 34.1 (2.08)
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)</p> <p>3. Displacement P2
Volumetric displacement cm³/rec (in³/rev)</p> <p>7B</p> <p>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)</p> | <p>4. Type of shaft
HT67CB
1 - non SAE Keyed Shaft
3 - SAE BB Splined Shaft
5 - SAE B Splined Shaft</p> <p>HT67CBW
2 - SAE BB Keyed Shaft</p> <p>5. Direction of rotation (Viewed from shaft end)
R - Turn right
L - Turn left</p> <p>6. Porting combination (see page Porting Diagrams)
00 - standard</p> <p>7. Design letter</p> <p>8. Port Connection (4 bolts SAE flange J518C)
00 - UNC Port Connection
M0 - Metric Port Connection (HT67CB for port connection 11, M1 only)</p> |
|--|---|
-
- | Code | | 4 bolt SAE flanges | | |
|------|--------|--------------------|--------------------|-------------------|
| UNC | Metric | P1 | P2 | S |
| 00 | 0M | 1" | 1" | 3" |
| 01 | M0 | 1" | 3/4" ¹⁾ | 3" |
| 10 | 1M | 1" | 1" | 2½" ²⁾ |
| 11 | M1 | 1" | 3/4" ¹⁾ | 2½" ²⁾ |
-
- 1) for 46 ml/rev max.
2) for 126 ml/rev max.
always select the largest cartridge in the front place. (see page Hose Size Selection Nomograph)
9. Modifications
Omit - Standard
718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT67CB/ HT67CBW Series

Installation Dimension mm (inch)

HT67CB, HT67CBW



Shaft torque limits [ml/rev x bar (in ³ /rev x psi)]	
Shaft	Vp x p max. (P1+P2)
1	14300 (12666)
2	21420 (18972)
3	32670 (28937)
5	20600 (18246)

High Pressure Double Vane Pump

HT67CB/ HT67CBW Series

Performance Characteristics

HT67CB, HT67CBW

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	003	0.66 in ³ /rev	5.14	3.61	-	2.11	8.45	-
	005	1.05 in ³ /rev	8.18	6.65	5.56	2.29	12.00	19.59
	006	1.30 in ³ /rev	10.13	8.60	7.51	2.40	14.28	23.57
	008	1.61 in ³ /rev	12.55	11.02	9.93	2.54	17.11	28.53
	010	2.08 in ³ /rev	16.22	14.69	13.60	2.76	21.38	36.00
	012	2.26 in ³ /rev	17.64	16.11	15.02	2.84	23.05	38.92
	014	2.81 in ³ /rev	21.88	20.35	19.26	3.09	27.99	47.56
	017	3.56 in ³ /rev	27.73	26.20	25.11	3.43	34.81	59.51
	020	3.89 in ³ /rev	30.34	28.81	27.42	3.58	37.86	64.85
	022	4.29 in ³ /rev	33.43	31.90	30.81	3.76	41.47	71.16
	025 ¹⁾	4.84 in ³ /rev	37.71	36.18	35.09	4.01	46.46	79.90
	028 ¹⁾	5.42 in ³ /rev	42.23	40.70	39.94 ²⁾	4.27	51.74	76.73 ²⁾
	031 ¹⁾	6.10 in ³ /rev	47.56	46.03	45.27 ²⁾	4.58	57.95	86.06 ²⁾
P2	002	0.35 in ³ /rev	2.29	1.84	1.26	0.67	3.48	7.23
	003	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
	004	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
	005	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
	006	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
	007	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
	008	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
	009	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 ³⁾	1.34	17.15	36.19 ³⁾
	012	2.50 in ³ /rev	16.24	15.79	15.29 ³⁾	1.47	19.97	42.22 ³⁾
	014	2.74 in ³ /rev	17.83	17.38	16.88 ³⁾	1.60	21.84	46.24 ³⁾
	015	3.05 in ³ /rev	19.81	19.36	18.91 ⁴⁾	1.74	24.26	47.85 ⁴⁾

1) 025 - 028 - 031 = 2500 R.P.M. max. 2) 028 - 031 = 2200 PSI max. int. 3) 011 - 012 - 014 = 4350 PSI max. int. 4) 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 Double Vane Pump HT6CC/ HT6CCW Series

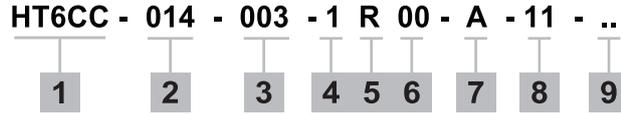
Specification

HT6CC, HT6CCW for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
003	10.8 (0.66)	275 (4000)	240 (3500)	003	10.8 (0.66)	275 (4000)	240 (3500)	600	2800	27.0 (59.4)
005	17.2 (1.05)			005	17.2 (1.05)					
006	21.3 (1.30)			006	21.3 (1.30)					
008	26.4 (1.61)			008	26.4 (1.61)					
010	34.1 (2.08)			010	34.1 (2.08)					
012	37.1 (2.26)			012	37.1 (2.26)					
014	46.0 (2.81)			014	46.0 (2.81)					
017	58.3 (3.56)			017	58.3 (3.56)					
020	63.8 (3.89)			020	63.8 (3.89)					
022	70.3 (4.29)			022	70.3 (4.29)					
025	79.3 (4.84)	025	79.3 (4.84)							
028	88.8 (5.42)	206 (3000)	160 (2300)	028	88.8 (5.42)	206 (3000)	160 (2300)	600	2800	27.0 (59.4)
031	100.0 (6.10)			031	100.0 (6.10)					

High Pressure Double Vane Pump HT6CC/ HT6CCW Series

Ordering Code : Double Pump



1. Model :

- Industrial - HT6CC
- Severe Duty Shaft (W) - HT6CCW
- SAE B 2 bolts mounting flange J744

4. Type of shaft

- HT6CC
- 1 - non SAE Keyed Shaft
- 3 - SAE BB Splined Shaft
- 5 - SAE B Splined Shaft

2. Displacement P1

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)

HT6CCW

- 2 - SAE BB Keyed 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 (HT67CB for port connection 11, M1 only)

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)

Code		4 bolt SAE flanges		
UNC	Metric	P1	P2	S
00	0M	1"	1"	3"
01	M0	1"	3/4" ¹⁾	3"
10	1M	1"	1"	2 1/2" ²⁾
11	M1	1"	3/4" ¹⁾	2 1/2" ²⁾

1) for 46 ml/rev max.

2) for 126 ml/rev max.

always select the largest cartridge in the front place. (see page Hose Size Selection Nomograph)

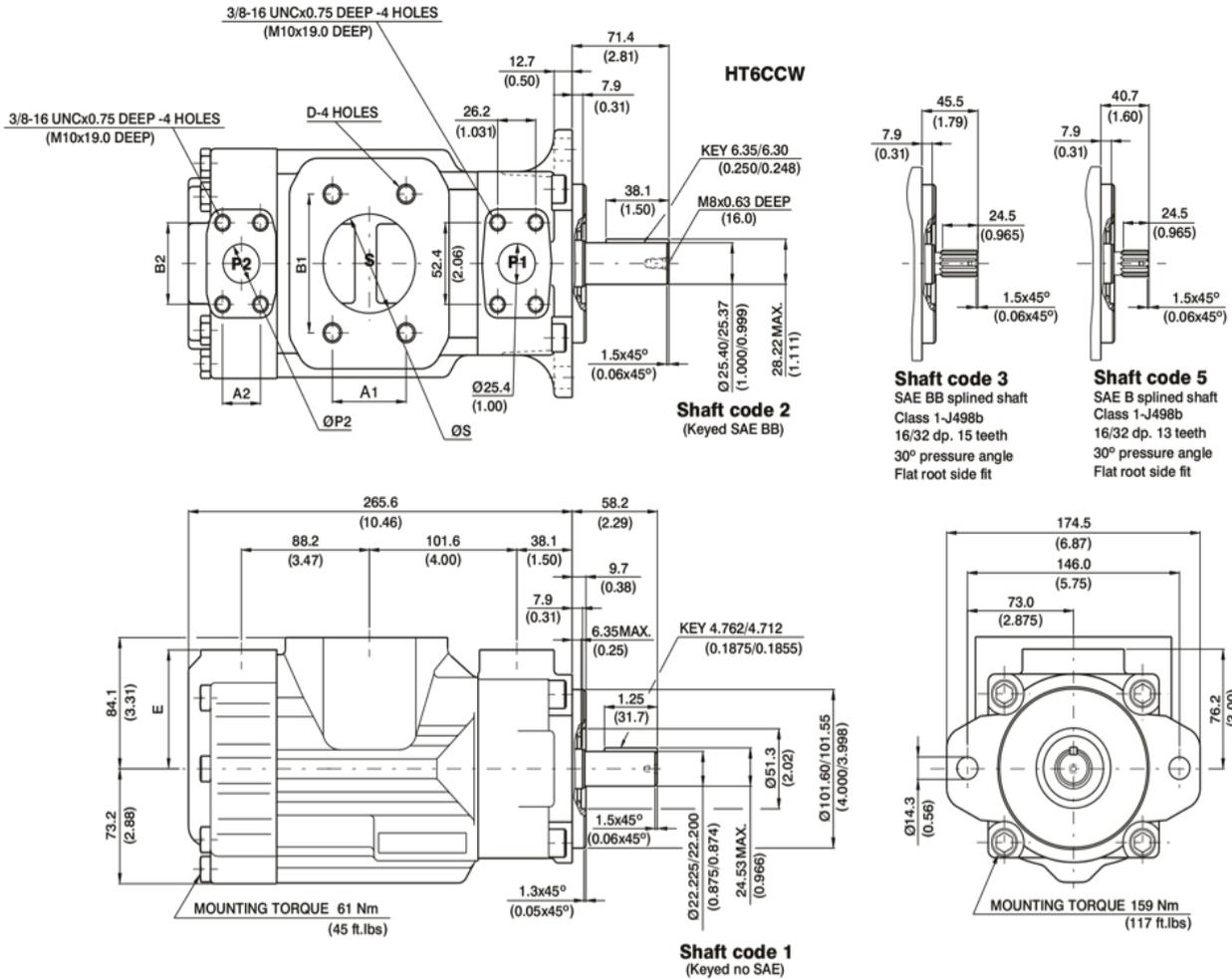
9. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT6CC/ HT6CCW Series

Installation Dimension mm (inch)

HT6CC, HT6CCW



Shaft torque limits [ml/rev x bar (in ³ /rev x psi)]	
Shaft	Vp x p max. (P1+P2)
1	14300 (12666)
2	21420 (18972)
3	32670 (28937)
5	20600 (18246)

Inlet Port Size	S	A1	B1	D
3"	76.2 (3.00)	61.9 (2.44)	106.4 (4.19)	5/8" - 11 UNC x 1.12 DEEP M16 x 28.4 DEEP
2½"	63.5 (2.50)	50.9 (2.00)	88.9 (3.50)	1/2" - 13 UNC x 0.94 DEEP M12 x 23.9 DEEP

Cover End Outlet Port Size	P2	A2	B2	E
1"	25.4 (1.00)	26.2 (1.03)	52.4 (2.06)	74.7 (2.94)
¾"	19.0 (0.75)	22.4 (0.88)	47.7 (1.88)	76.2 (3.00)

High Pressure Double Vane Pump

HT6CC/ HT6CCW Series

HT6CC, HT6CCW

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 & P2	003	0.66 in ³ /rev	5.14	3.61	-	2.11	8.45	-
	005	1.05 in ³ /rev	8.18	6.65	5.56	2.29	12.00	19.59
	006	1.30 in ³ /rev	10.13	8.60	7.51	2.40	14.28	23.57
	008	1.61 in ³ /rev	12.55	11.02	9.93	2.54	17.11	28.53
	010	2.08 in ³ /rev	16.22	14.69	13.60	2.76	21.38	36.00
	012	2.26 in ³ /rev	17.64	16.11	15.02	2.84	23.05	38.92
	014	2.81 in ³ /rev	21.88	20.35	19.26	3.09	27.99	47.56
	017	3.56 in ³ /rev	27.73	26.20	25.11	3.43	34.81	59.51
	020	3.89 in ³ /rev	30.34	28.81	27.42	3.58	37.86	64.85
	022	4.29 in ³ /rev	33.43	31.90	30.81	3.76	41.47	71.16
	025 ¹⁾	4.84 in ³ /rev	37.71	36.18	35.09	4.01	46.46	79.90
	028 ¹⁾	5.42 in ³ /rev	42.23	40.70	39.94 ²⁾	4.27	51.74	76.73 ²⁾
	031	6.10 in ³ /rev	47.56	46.03	45.27 ²⁾	4.58	57.95	86.06 ²⁾

1) 025 - 028 - 031 = 2500 R.P.M. max. 2) 028 - 031 = 2200 PSI max. int.
 - Not to use because internal leakage greater than 50% theoretical flow.
 - Port connection can be furnished with metric threads.

High Pressure Double Vane Pump

HT6CCM/ HT6CCP/ HT6CCMW Series

Specification

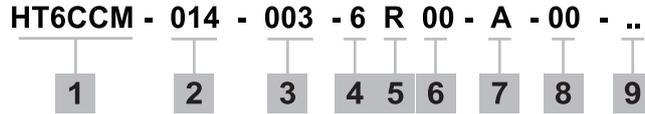
HT6CCM, HT6CCP, HT6CCMW for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
003	10.8 (0.66)	275 (4000)	240 (3500)	003	10.8 (0.66)	275 (4000)	240 (3500)	400	2800	27.0 (59.4)
005	17.2 (1.05)			005	17.2 (1.05)					
006	21.3 (1.30)			006	21.3 (1.30)					
008	26.4 (1.61)			008	26.4 (1.61)					
010	34.1 (2.08)			010	34.1 (2.08)					
012	37.1 (2.26)			012	37.1 (2.26)					
014	46.0 (2.81)			014	46.0 (2.81)					
017	58.3 (3.56)			017	58.3 (3.56)					
020	63.8 (3.89)			020	63.8 (3.89)					
022	70.3 (4.29)			022	70.3 (4.29)					
025	79.3 (4.84)			025	79.3 (4.84)					
028	88.8 (5.42)	206 (3000)	160 (2300)	028	88.8 (5.42)	206 (3000)	160 (2300)			
031	100.0 (6.10)			031	100.0 (6.10)					

High Pressure Double Vane Pump

HT6CCM/ HT6CCP/ HT6CCMW Series

Ordering Code : Double Pump



1. Model :

- Mobile 1 Shaft seals(M) - HT6CCM
- Mobile 2 Shaft seals(P) - HT6CCP
- Severe Duty Shaft(W) - HT6CCMW
- SAE B 2 bolts mounting flange J744

HT6CCP

- 3 - non SAE Splined Shaft
- 4 - SAE BB Splined Shaft
- 6 - non SAE Splined Shaft

HT6CCMW

- 2 - SAE BB Keyed Shaft
- R - Special Keyed Shaft
- X - Special Keyed Shaft
- W - Special Keyed Shaft
- V - Special Keyed Shaft
- T - SAE J718c Splined Shaft
- S - DIN 5462 Keyed Shaft
- Q - SAE C Keyed Shaft

2. Displacement P1

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)

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	0M	1"	1"	3"
01	M0	1"	3/4" ¹⁾	3"
10	1M	1"	1"	2 1/2" ²⁾
11	M1	1"	3/4" ¹⁾	2 1/2" ²⁾

1) for 46 ml/rev max.

2) for 126 ml/rev max.

always select the largest cartridge in the front place. (see page Hose Size Selection Nomograph)

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

- HT6CCM
- 1 - non SAE Keyed Shaft
- 3 - SAE BB Splined Shaft
- 5 - SAE B Splined Shaft
- 6 - DIN 5462 Splined Shaft

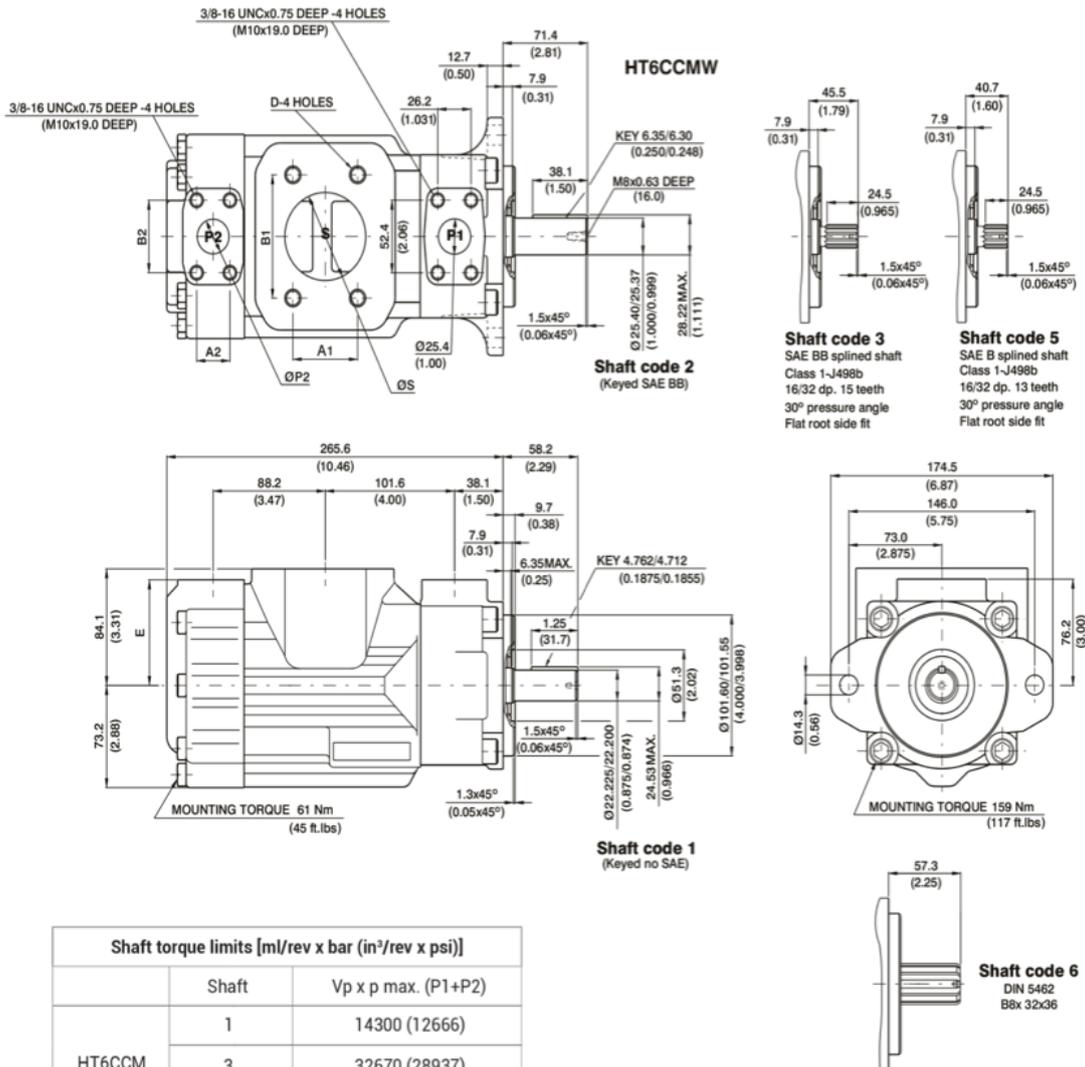
9. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT6CCM/ HT6CCP/ HT6CCMW Series

Installation Dimension mm (inch)

HT6CCM, HT6CCP, HT6CCMW for Double pump

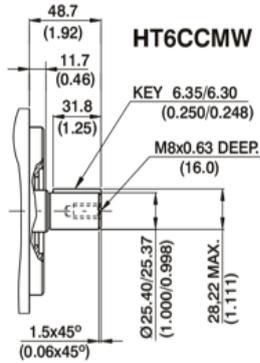


Shaft torque limits [ml/rev x bar (in ³ /rev x psi)]		
	Shaft	Vp x p max. (P1+P2)
HT6CCM	1	14300 (12666)
	3	32670 (28937)
	5	20600 (18246)
HT6CCMW	2	21420 (18972)
	R	18100 (16032)
	X	25400 (22500)
	W	32670 (28937)
	V	
	T	
	S	
Q		
HT6CCP	3	20600 (18246)
	4	32670 (28937)
	6	

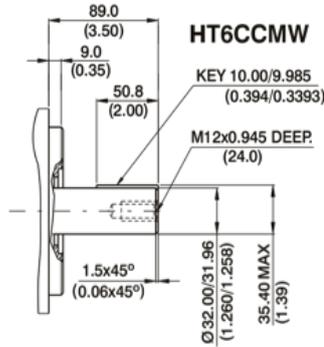
Inlet Port Size	S	A1	B1	D
3"	76.2 (3.00)	61.9 (2.44)	106.4 (4.19)	5/8" - 11 UNC x 1.12 DEEP M16 x 28.4 DEEP
2½"	63.5 (2.50)	50.9 (2.00)	88.9 (3.50)	1/2" - 13 UNC x 0.94 DEEP M12 x 23.9 DEEP

Cover End Outlet Port Size	P2	A2	B2	E
1"	25.4 (1.00)	26.2 (1.03)	52.4 (2.06)	74.7 (2.94)
¾"	19.0 (0.75)	22.4 (0.88)	47.7 (1.88)	76.2 (3.00)

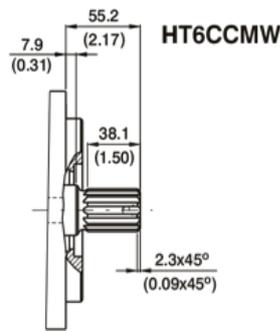
High Pressure Double Vane Pump HT6CCM/ HT6CCP/ HT6CCMW Series



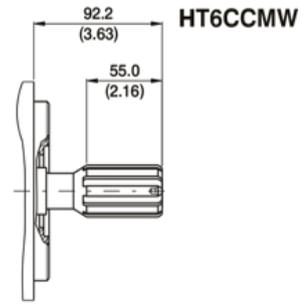
Shaft code R



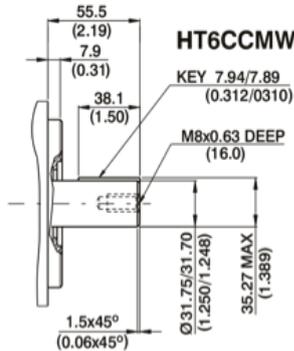
Shaft code V



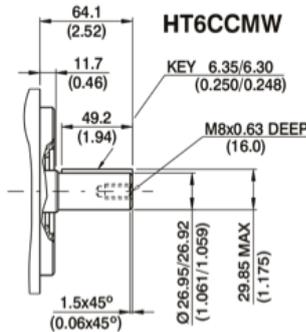
Shaft code Q
SAE C splined shaft
Class 1-J498b
12/24 Dp. 14 Teeth
30° Pressure angle
Flat root side fit



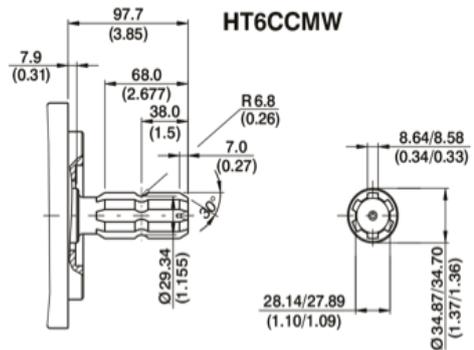
Shaft code S
DIN 5462
B8x32x36



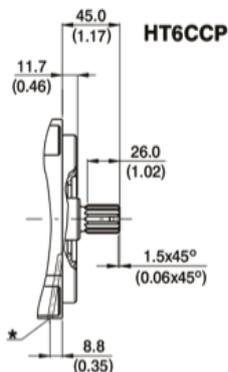
Shaft code W



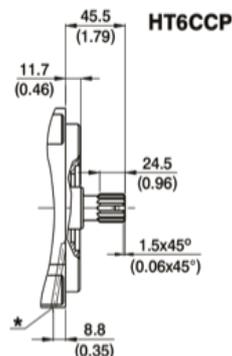
Shaft code X



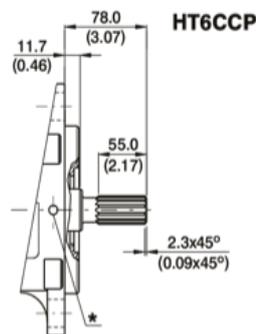
Shaft code T
SAE J718C
540 rpm power take-off
For Farm Tractor application



Shaft code 3
no SAE splined shaft
Class 1-J498b
16/32 dp. 13 teeth
30° pressure angle
Flat root side fit



Shaft code 4
SAE BB splined shaft
Class 1-J498b
16/32 dp. 15 teeth
30° pressure angle
Flat root side fit



Shaft code 6
non SAE splined shaft
Class 1-J498b
12/24 dp. 14 teeth
30° pressure angle
Flat root side fit

*Drain hole between double Shaft seals

High Pressure Double Vane Pump

HT6CCM/ HT6CCP/ HT6CCMW Series

Performance Characteristics

HT6CCM, HT6CCP, HT6CCMW

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 & P2	003	0.66 in ³ /rev	5.14	3.61	-	2.11	8.45	-
	005	1.05 in ³ /rev	8.18	6.65	5.56	2.29	12.00	19.59
	006	1.30 in ³ /rev	10.13	8.60	7.51	2.40	14.28	23.57
	008	1.61 in ³ /rev	12.55	11.02	9.93	2.54	17.11	28.53
	010	2.08 in ³ /rev	16.22	14.69	13.60	2.76	21.38	36.00
	012	2.26 in ³ /rev	17.64	16.11	15.02	2.84	23.05	38.92
	014	2.81 in ³ /rev	21.88	20.35	19.26	3.09	27.99	47.56
	017	3.56 in ³ /rev	27.73	26.20	25.11	3.43	34.81	59.51
	020	3.89 in ³ /rev	30.34	28.81	27.42	3.58	37.86	64.85
	022	4.29 in ³ /rev	33.43	31.90	30.81	3.76	41.47	71.16
	025 ¹⁾	4.84 in ³ /rev	37.71	36.18	35.09	4.01	46.46	79.90
	028 ¹⁾	5.42 in ³ /rev	42.23	40.70	39.94 ²⁾	4.27	51.74	76.73 ²⁾
	031	6.10 in ³ /rev	47.56	46.03	45.27 ²⁾	4.58	57.95	86.06 ²⁾

1) 025 - 028 - 031 = 2500 R.P.M. max. 2) 028 - 031 = 2200 PSI max. int.
 - Not to use because internal leakage greater than 50% theoretical flow.
 - Port connection can be furnished with metric threads.

High Pressure Double Vane Pumps HT7DB/ HT7DBS/ HT7DBW Series

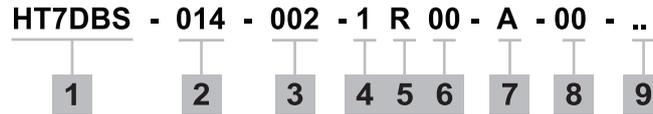
Specification

HT7DB, HT7DBS, HT7DBW for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
014	47.6 (2.90)	300 (4350)	250 (3600)	002	5.8 (0.35)	300 (4350)	275 (4000)	600	2200	37.0 (81.4)
017	58.2 (3.55)			003	9.8 (0.59)					
020	66.0 (4.03)			004	12.8 (0.78)					
022	70.0 (4.27)			005	15.9 (0.97)					
024	79.5 (4.85)			006	19.8 (1.20)					
028	89.7 (5.47)			007	22.5 (1.37)					
031	98.3 (6.00)			008	24.9 (1.51)					
035	111.0 (6.77)	280 (4060)		009	28.0 (1.70)					
038	120.3 (7.34)			010	31.8 (1.94)					
042	136.0 (8.30)			011	35.0 (2.13)					
045	145.7 (8.89)	240 (3500)	206 (3000)	012	41.0 (2.50)	280 (4060)	240 (3500)			
050	158.0 (9.64)	206 (3000)	160 (2300)	014	45.0 (2.74)					
				015	50.0 (3.05)					

High Pressure Double Vane Pumps HT7DB/ HT7DBS/ HT7DBW Series

Ordering Code



1. Model :

- Industrial - HT7DB ISO 2 bolts 3019-2 mounting flange 125 A2 HW
- HT7DBS SAE C 2 bolts mounting flange J744
- Severe Duty Shaft (W) - HT7DBW SAE C 2 bolts mounting flange J744

4. Type of shaft

- HT7DB, HT7DBS
- 5 - ISO 3019-2-G32M Keyed Shaft
- HT7DBS
- 1 - SAE C Keyed Shaft
- 2 - non SAE Keyed Shaft
- 3 - SAE C Splined Shaft
- 4 - SAE C spec. Splined Shaft

2. Displacement P1

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)

HT7DBW

- 5 - non SAE Keyed Shaft

5. Direction of rotation (view on shaft end)

- R - Turn right
- L - Turn left

6. Porting combination (see page Porting Diagrams)

- 00 - standard

7. Design letter

8. Port Connection

- 00 - UNC Port Connection (Except HT7DB)
- 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"

3. Displacement P2

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)

9. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pumps

HT7DB/ HT7DBS/ HT7DBW Series

Performance Characteristics

HT7DB, HT7DBS, HT7DBW

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 in ³ /rev	22.64	20.46	18.82	4.02	29.31	49.34
	017	3.55 in ³ /rev	27.68	25.50	23.86	4.31	35.20	59.64
	020	4.00 in ³ /rev	31.39	29.21	27.57	4.53	39.52	67.21
	022	4.29 in ³ /rev	33.43	31.69	30.32	4.19	42.37	72.57
	024	4.80 in ³ /rev	37.82	35.63	33.99	4.91	47.02	80.32
	028	5.50 in ³ /rev	42.66	40.48	38.84	5.19	52.68	90.23
	031	6.00 in ³ /rev	46.75	44.57	42.93	5.43	57.45	98.58
	035	6.80 in ³ /rev	52.79	50.61	48.97	5.78	64.50	110.91
	038	7.30 in ³ /rev	57.21	55.03	53.39	6.04	69.66	119.94
	042	8.30 in ³ /rev	64.68	62.50	60.86	6.47	78.37	135.19
	045	8.90 in ³ /rev	69.29	67.11	65.47	6.74	83.74	144.61
	050	9.64 in ³ /rev	75.14	72.96	71.78 ¹⁾	7.08	90.58	134.54 ¹⁾
P2	003	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
	004	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
	005	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
	006	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
	007	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
	008	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
	009	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 ²⁾	1.34	17.15	36.19 ²⁾
	012	2.50 in ³ /rev	16.24	15.79	15.29 ²⁾	1.47	19.97	42.22 ²⁾
	014	2.74 in ³ /rev	17.83	17.38	16.88 ²⁾	1.60	21.84	46.24 ²⁾
	015	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.

High Pressure Double Vane Pump HT6DCM/ HT6DCP/ HT6DCMW Series

Specification

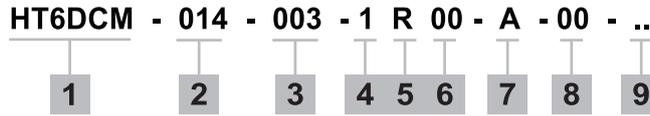
HT6DCM, HT6DCP, HT6DCMW for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
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)	206 (3000)	160 (2300)			
061	193.3 (11.80)			028	88.8 (5.42)					
				031	100.0 (6.10)					

High Pressure Double Vane Pump

HT6DCM/ HT6DCP/ HT6DCMW Series

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)
- 061 - 193.3 (11.80)

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	1 1/4"	1"	3"
01	M1	1 1/4"	3/4"	3"

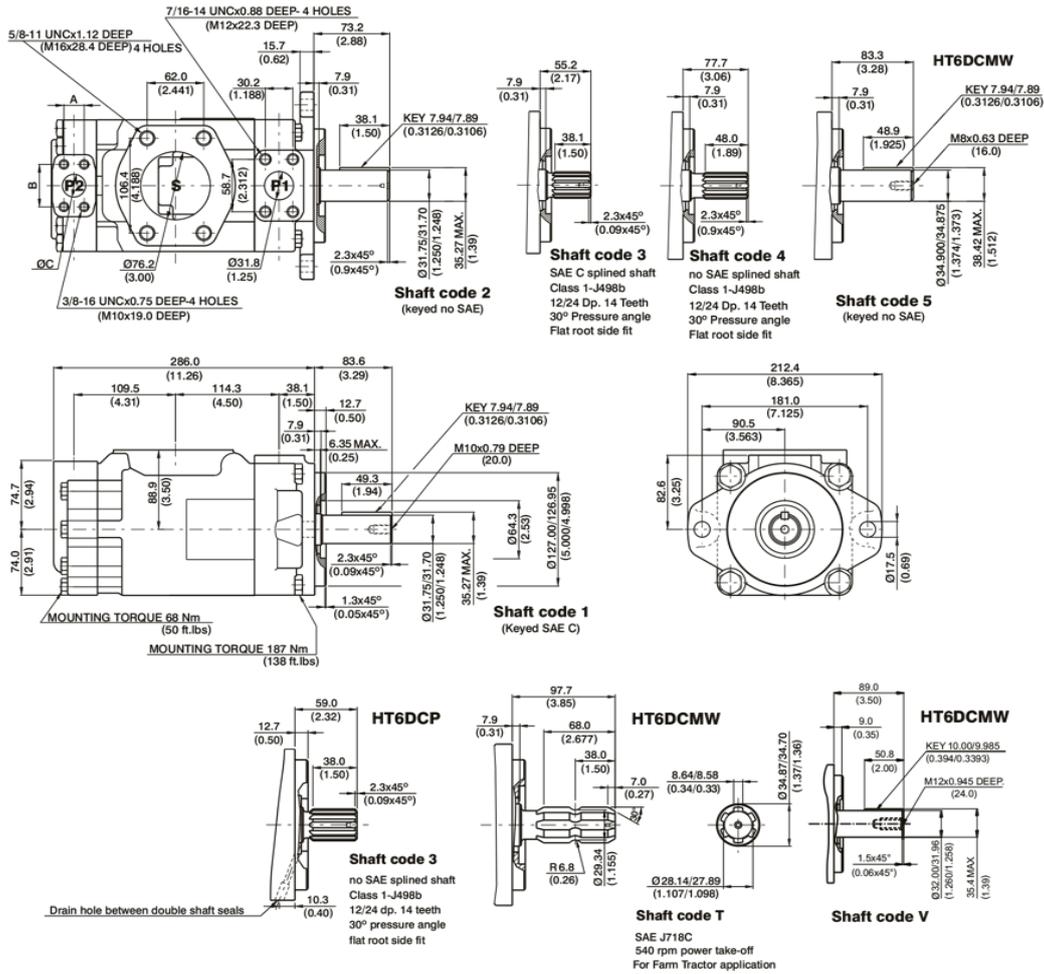
9. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT6DCM/ HT6DCP/ HT6DCMW Series

Installation Dimension mm (inch)

HT6DCM, HT6DCP, HT6DCMW



Shaft torque limits [ml/rev x bar (in ³ /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)

High Pressure Double Vane Pump

HT6DCM/ HT6DCP/ HT6DCMW Series

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 in ³ /rev	22.64	20.46	18.82	4.02	29.31	49.34
	017	3.55 in ³ /rev	27.68	25.50	23.86	4.31	35.20	59.64
	020	4.00 in ³ /rev	31.39	29.21	27.57	4.53	39.52	67.21
	024	4.80 in ³ /rev	37.82	35.63	33.99	4.91	47.02	80.32
	028	5.50 in ³ /rev	42.66	40.48	38.84	5.19	52.68	90.23
	031	6.00 in ³ /rev	46.75	44.57	42.93	5.43	57.45	98.58
	035	6.80 in ³ /rev	52.79	50.61	48.97	5.78	64.50	110.91
	038	7.30 in ³ /rev	57.21	55.03	53.39	6.04	69.66	119.94
	042 ²⁾	8.30 in ³ /rev	64.68	62.50	60.86	6.47	78.37	135.19
	045 ²⁾	8.90 in ³ /rev	69.29	67.11	65.47	6.74	83.74	144.61
	050 ²⁾	9.64 in ³ /rev	75.14	72.96	71.78 ¹⁾	7.08	90.58	134.54 ¹⁾
	061 ²⁾	11.80 in ³ /rev	90.98	84.55	80.87 ¹⁾	8.30	109.61	183.48 ¹⁾
P2	003	0.66 in ³ /rev	5.14	3.61	-	2.11	8.45	-
	005	1.05 in ³ /rev	8.18	6.65	5.56	2.29	12.00	19.59
	006	1.30 in ³ /rev	10.13	8.60	7.51	2.40	14.28	23.57
	008	1.61 in ³ /rev	12.55	11.02	9.93	2.54	17.11	28.53
	010	2.08 in ³ /rev	16.22	14.69	13.60	2.76	21.38	36.00
	012	2.26 in ³ /rev	17.64	16.11	15.02	2.84	23.05	38.92
	014	2.81 in ³ /rev	21.88	20.35	19.26	3.09	27.99	47.56
	017	3.56 in ³ /rev	27.73	26.20	25.11	3.43	34.81	59.51
	020	3.89 in ³ /rev	30.34	28.81	27.42	3.58	37.86	64.85
	022	4.29 in ³ /rev	33.43	31.90	30.81	3.76	41.47	71.16
	025	4.84 in ³ /rev	37.71	36.18	35.09	4.01	46.46	79.90
	028	5.42 in ³ /rev	42.23	40.70	39.94 ¹⁾	4.27	51.74	76.73 ¹⁾
031	6.10 in ³ /rev	47.56	46.03	45.27 ¹⁾	4.58	57.95	86.06 ¹⁾	

1) 028 - 031 - 050 - 061 = 3000 PSI max. int.

2) 042 - 045 - 050 - 061 = 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 HT67DC/ HT67DCW Series

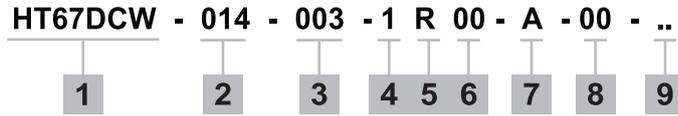
Specification

HT67DC, HT67DCW for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
014	47.6 (2.90)	300 (4350)	250 (3600)	003	10.8 (0.66)	275 (4000)	240 (3500)	600	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)					
022	70.0 (4.27)			008	26.4 (1.61)					
024	79.5 (4.85)			010	34.1 (2.08)					
028	89.7 (5.47)			012	37.1 (2.26)					
031	98.3 (6.00)			014	46.0 (2.81)					
035	111.0 (6.77)			017	58.3 (3.56)					
038	120.3 (7.34)	280 (4060)	020	63.8 (3.89)						
042	136.0 (8.30)	260 (3770)	235 (3400)	022	70.3 (4.29)					
045	145.7 (8.89)	240 (3500)	206 (3000)	025	79.3 (4.84)					
050	158.0 (9.64)	206 (3000)	160 (2300)	028	88.8 (5.42)					
				031	100.0 (6.10)					

High Pressure Double Vane Pump HT67DC/ HT67DCW Series

Ordering Code : Double Pump



1. Model :

- Industrial - HT67DC
- Severe Duty Shaft (W) - HT67DCW
- SAE C 2 bolts mounting flange J744

4. Type of shaft

- HT67DC
- 1 - SAE C Keyed Shaft
- 2 - non SAE Keyed Shaft
- 3 - SAE C Splined Shaft
- 4 - SAE C spec. Splined Shaft

2. Displacement P1

Volumetric displacement cm³/rec (in³/rev)

- 7D
- 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)

HT67DCW

- 5 - non SAE Keyed 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	1 ¼"	1"	3"
01	M1	1 ¼"	3/4"	3"

3. Displacement P2

Volumetric displacement cm³/rec (in³/rev)

- 6C
- 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)

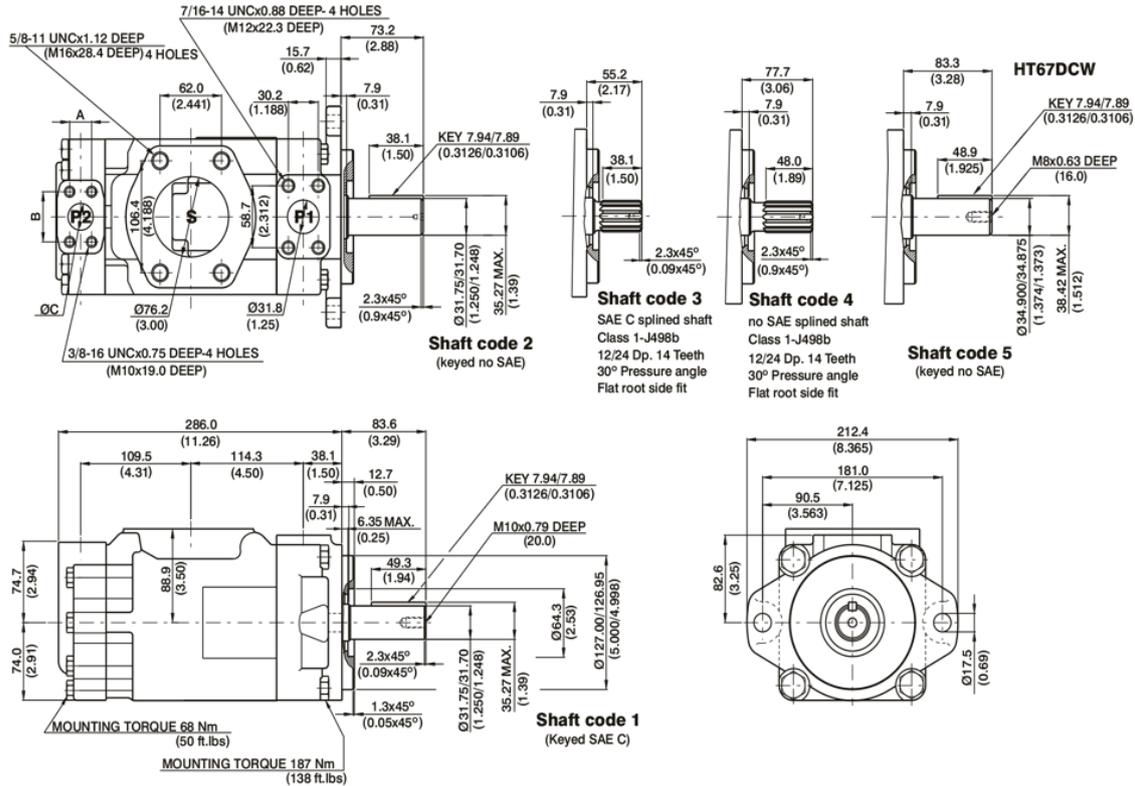
9. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT67DC/ HT67DCW Series

Installation Dimension mm (inch)

HT67DC, HT67DCW



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

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)

High Pressure Double Vane Pump

HT67DC/ HT67DCW Series

Performance Characteristics

HT67DC, HT67DCW

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 in ³ /rev	22.64	20.46	18.82	4.02	29.31	49.34
	017	3.55 in ³ /rev	27.68	25.50	23.86	4.31	35.20	59.64
	020	4.00 in ³ /rev	31.39	29.21	27.57	4.53	39.52	67.21
	022	4.29 in ³ /rev	33.43	31.69	30.32	4.19	42.37	72.57
	024	4.80 in ³ /rev	37.82	35.63	33.99	4.91	47.02	80.32
	028	5.50 in ³ /rev	42.66	40.48	38.84	5.19	52.68	90.23
	031	6.00 in ³ /rev	46.75	44.57	42.93	5.43	57.45	98.58
	035	6.80 in ³ /rev	52.79	50.61	48.97	5.78	64.50	110.91
	038	7.30 in ³ /rev	57.21	55.03	53.39	6.04	69.66	119.94
	042	8.30 in ³ /rev	64.68	62.50	60.86	6.47	78.37	135.19
	045	8.90 in ³ /rev	69.29	67.11	65.47	6.74	83.74	144.61
	050	9.64 in ³ /rev	75.14	72.96	71.78 ¹⁾	7.08	90.58	134.54 ¹⁾
P2	003	0.66 in ³ /rev	5.14	3.61	-	2.11	8.45	-
	005	1.05 in ³ /rev	8.18	6.65	5.56	2.29	12.00	19.59
	006	1.30 in ³ /rev	10.13	8.60	7.51	2.40	14.28	23.57
	008	1.61 in ³ /rev	12.55	11.02	9.93	2.54	17.11	28.53
	010	2.08 in ³ /rev	16.22	14.69	13.60	2.76	21.38	36.00
	012	2.26 in ³ /rev	17.64	16.11	15.02	2.84	23.05	38.92
	014	2.81 in ³ /rev	21.88	20.35	19.26	3.09	27.99	47.56
	017	3.56 in ³ /rev	27.73	26.20	25.11	3.43	34.81	59.51
	020	3.89 in ³ /rev	30.34	28.81	27.42	3.58	37.86	64.85
	022	4.29 in ³ /rev	33.43	31.90	30.81	3.76	41.47	71.16
	025	4.84 in ³ /rev	37.71	36.18	35.09	4.01	46.46	79.90
	028	5.42 in ³ /rev	42.23	40.70	39.94 ¹⁾	4.27	51.74	76.73 ¹⁾
031 ^{using}	6.10 in ³ /rev	47.56	46.03	45.27 ¹⁾	4.58	57.95	86.06 ¹⁾	

1) 028 - 031 - 050 = 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 Double Vane Pump HT7DD/ HT7DDS Series

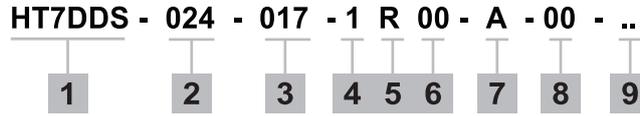
Specification

HT7DD, HT7DDS for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
014	47.6 (2.90)	300 (4350)	250 (3600)	014	47.6 (2.90)	300 (4350)	250 (3600)	600	2200	56.0 (123.4)
017	58.2 (3.55)			017	58.2 (3.55)					
020	66.0 (4.03)			020	66.0 (4.03)					
022	70.0 (4.27)			022	70.0 (4.27)					
024	79.5 (4.85)			024	79.5 (4.85)					
028	89.7 (5.47)			028	89.7 (5.47)					
031	98.3 (6.00)			031	98.3 (6.00)					
035	111.0 (6.77)	280 (4060)	250 (3600)	035	111.0 (6.77)	280 (4060)	250 (3600)			
038	120.3 (7.34)			038	120.3 (7.34)					
042	136.0 (8.30)	260 (3770)	230 (3400)	042	136.0 (8.30)	260 (3770)	230 (3400)			
045	145.7 (8.89)	240 (3500)	210 (3000)	045	145.7 (8.89)	240 (3500)	210 (3000)			
050	158.0 (9.64)	210 (3000)	160 (2300)	050	158.0 (9.64)	210 (3000)	160 (2300)			

High Pressure Double Vane Pump HT7DD/ HT7DDS Series

Ordering Code : Double Pump



1. Series :

- Industrial - HT7DD ISO 6 bolts 3019-2 mounting flange 125 B4 HW
- HT7DDS SAE C 6 bolts mounting flange J744c

2. Displacement P1

Volumetric displacement cm³/rev (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. Displacement P2

Volumetric displacement cm³/rev (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)

4. Type of shaft

- HT7DD, HT7DDS
- 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 (view on 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

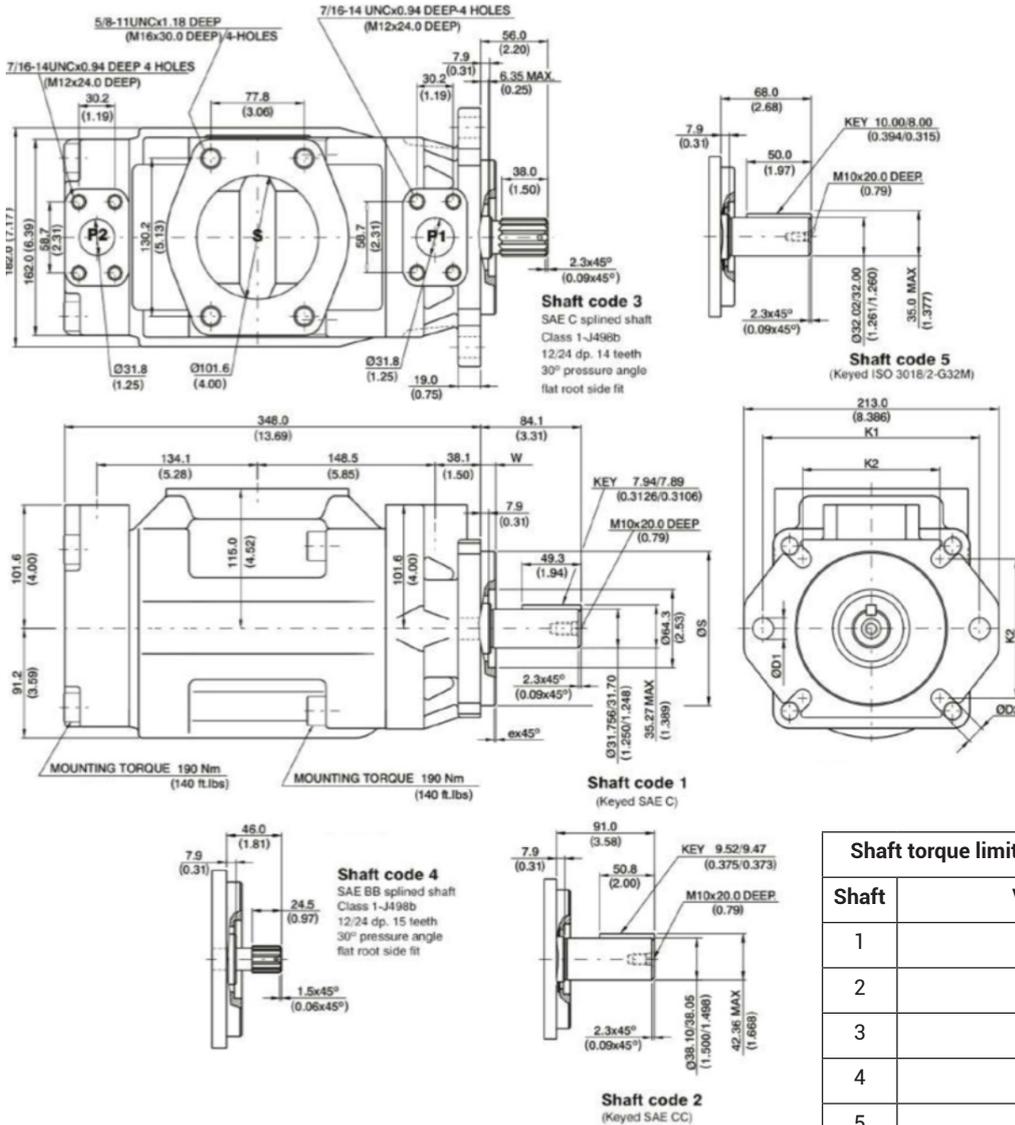
9. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT7DD/ HT7DDS Series

Installation Dimension mm (inch)

HT7DD, HT7DDS



Shaft torque limits [ml/rev x bar (in3/rev x psi)]	
Shaft	Vp x p max. (P1+P2)
1	43240 (38299)
2	71822 (63552)
3	61200 (54207)
4	28120 (31780)
5	35424 (40035)

Alternate mounting flange								
Model	ØS		ex 45°	W	K1	ØD1	K2	ØD2
	MAX.	MIN.						
HT7DD	125.00 (4.921)	124.94 (4.919)	2.0 (0.079)	9.5 (0.374)	180.0 (7.087)	18.0 (0.709)	113.1 (4.454)	13.9 (0.551)
HT7DDS	127.00 (5.00)	126.94 (4.998)	1.5 (0.059)	12.7 (0.50)	181.0 (7.126)	17.5 (0.689)	114.5 (4.508)	14.3 (0.563)

High Pressure Double Vane Pump HT7DD/ HT7DDS Series

Performance Characteristics

HT7DD, HT7DDS

OPERATING CHARACTERISTICS - TYPICAL [115 SUS]

Pressure port	Series	Volumetric Displacement Vp cm ³ /rev (in ³ /rev)	Speed n [R.P.M]	Flow Q [LPM (GPM)]			Input power P [KW (HP)]		
				p = 0 bar (0 PSI)	p = 140 bar (2000 PSI)	p = 250 bar (3630 PSI)	p = 7 bar (100 PSI)	p = 140 bar (2000 PSI)	p = 250 bar (3630 PSI)
P1 & P2	014	43.9 (2.68)	1800	79.1 (20.92)	72.5 (19.18)	67.3 (17.81)	2.6 (3.46)	20.7 (27.77)	35.0 (47.03)
	017	55.0 (3.36)		98.8 (26.16)	92.3 (24.41)	87.0 (23.04)	2.8 (3.77)	25.3 (33.88)	43.0 (57.71)
	020	66.0 (4.03)		118.6 (31.39)	112.0 (29.64)	106.8 (28.27)	3.0 (4.07)	29.8 (39.98)	50.9 (68.39)
	022	70.3 (4.29)		126.4 (33.43)	119.8 (31.69)	104.6 (30.32)	3.1 (4.19)	31.6 (42.37)	54.0 (72.57)
	024	81.1 (4.95)		145.8 (38.57)	139.2 (36.82)	134.0 (35.35)	3.4 (4.49)	36.1 (48.36)	61.9 (83.06)
	028	89.9 (5.49)		161.8 (42.80)	155.2 (41.06)	150.0 (39.69)	3.5 (4.74)	39.7 (53.30)	68.3 (91.70)
	031	99.1 (6.05)		178.3 (47.18)	171.7 (45.43)	166.5 (44.06)	3.7 (4.99)	43.6 (58.41)	75.0 (100.63)
	035	113.4 (6.92)		203.9 (53.93)	197.2 (52.18)	192.0 (50.81)	4.0 (5.39)	49.4 (66.29)	85.3 (114.42)
	038	120.6 (7.36)		216.8 (57.35)	210.2 (55.61)	204.9 (54.24)	4.2 (5.59)	52.4 (70.28)	90.5 (121.42)
	042	137.5 (8.39)		247.2 (65.39)	240.6 (63.65)	235.4 (62.28)	4.5 (6.05)	59.4 (79.66)	102.7 (137.83)
	045	145.7 (8.89)		262.0 (69.29)	253.6 (67.11)	246.8 (65.31)	5.0 (6.74)	62.4 (83.75)	108.7 (145.79)
	050	157.9 (9.64)		284.0 (75.14)	275.8 (72.96)	271.3 (71.78)	5.3 (7.08)	67.5 (90.58)	100.3 (134.50)

1) 035 - 038 = 280 bar (4060 PSI) Max. int.

2) 042 = 260 bar (3770 PSI) Max. int.

3) 045 = 240 bar (3500 PSI) Max. int.

4) 050 = 210 bar (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 Double Vane Pump HT7EB/ HT7EBS Series

Specification

HT7EB, HT7EBS for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
042	132.3 (8.07)	240 (3500)	206 (3000)	002	5.8 (0.35)	300 (4350)	275 (4000)	600	2200	54.2 (119.2)
045	142.4 (8.70)			003	9.8 (0.59)					
050	158.5 (9.67)			004	12.8 (0.78)					
052	164.8 (10.00)			005	15.9 (0.97)					
054	173.8 (10.60)			006	19.8 (1.20)					
057	180.7 (11.02)			007	22.5 (1.37)					
062	196.7 (12.00)			008	24.9 (1.51)					
066	213.3 (13.00)			009	26.0 (1.70)					
072	227.1 (13.86)			010	31.8 (1.94)					
085	269.8 (16.40)			90 (1300)	75 (1100)					
				012	41.0 (2.50)					
				014	45.0 (2.74)					
				015	50.0 (3.05)					

High Pressure Double Vane Pump

HT7EB/ HT7EBS Series

Ordering Code : Double Pump

HT7EBS - 042 - 002 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8	9
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1. Model :

Industrial - HT7EB ISO 2 bolts 3019-2
mounting flange 125 A2 HW

- HT7EBS SAE C 2 bolts
mounting flange J744

2. Displacement P1

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. Displacement P2

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)

4. Type of shaft

HT7EB, HT7EBS

5 - ISO R775-G38M Keyed Shaft

HT7EBS

1 - SAE CC Keyed Shaft

2 - non SAE Keyed Shaft

3 - SAE C Splined Shaft

4 - SAE CC 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)

01 - UNC Port Connection (Except HT7EB)

M1 - Metric Port Connection

9. Modifications

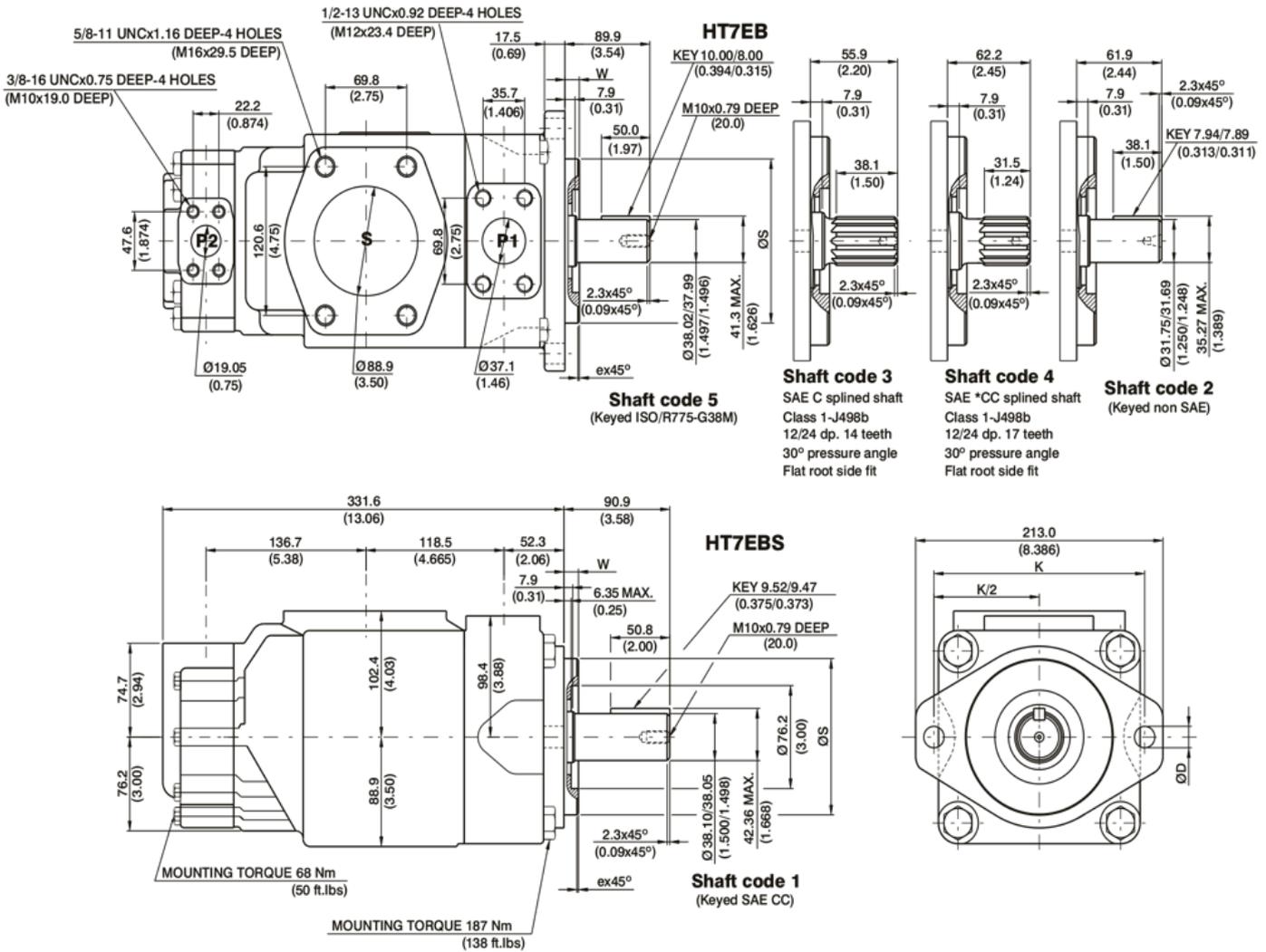
Omit - Standard

718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT7EB/ HT7EBS Series

Installation Dimension mm (inch)

HT7EB, HT7EBS



Alternate mounting flange						
Model	ØS		ex 45°	W	K	ØD
	MAX.	MIN.				
HT7EB	124.99 (4.921)	124.94 (4.919)	2.0 (0.079)	9.49 (0.374)	180.0 (7.087)	18.0 (0.709)
HT7EBS	127.00 (5.00)	126.94 (4.998)	1.3 (0.051)	12.7 (0.50)	181.0 (7.126)	17.5 (0.689)

Shaft torque limits [ml/rev x bar (in ³ /rev x psi)]	
Shaft	Vp x p max. (P1+P2)
1	68568 (60673)
2	34590 (30638)
3	61200 (54207)
4	68568 (60673)
5	

High Pressure Double Vane Pump

HT7EB/ HT7EBS Series

Performance Characteristics

HT7EB, HT7EBS

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	042	8.07 in ³ /rev	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⁾	-
P2	002	0.35 in ³ /rev	2.29	1.84	1.26	0.67	3.48	7.23
	003	0.59 in ³ /rev	3.88	3.43	2.85	0.80	5.36	11.52
	004	0.78 in ³ /rev	5.07	4.62	4.04	0.80	6.70	14.74
	005	0.97 in ³ /rev	6.31	5.86	5.28	0.93	8.17	18.09
	006	1.20 in ³ /rev	7.84	7.39	6.81	0.93	10.05	22.25
	007	1.37 in ³ /rev	8.90	8.45	7.89	1.07	11.39	25.20
	008	1.51 in ³ /rev	9.88	9.43	8.84	1.07	12.46	27.74
	009	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 ²⁾	1.34	17.15	36.19 ²⁾
	012	2.50 in ³ /rev	16.24	15.79	15.29 ²⁾	1.47	19.97	42.22 ²⁾
	014	2.74 in ³ /rev	17.83	17.38	16.88 ²⁾	1.60	21.84	46.24 ²⁾
	015	3.05 in ³ /rev	19.81	19.36	18.91 ³⁾	1.74	24.26	47.85 ³⁾

1) 085 = 1300 PSI max. int. 2) 011 - 012 - 014 = 4350 PSI max. int. 3) 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 Double Vane Pump HT67EC Series

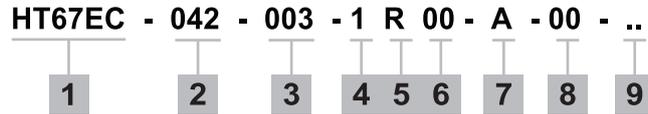
Specification

HT67EC for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
042	132.3 (8.07)	240 (3500)	206 (3000)	003	10.8 (0.66)	275 (4000)	240 (3500)	600	2200	54.2 (119.2)
045	142.4 (8.70)			005	17.2 (1.05)					
050	158.5 (9.67)			006	21.3 (1.30)					
052	164.8 (10.00)			008	26.4 (1.61)					
054	173.8 (10.60)			010	34.1 (2.08)					
057	180.7 (11.02)			012	37.1 (2.26)					
062	196.7 (12.00)			014	46.0 (2.81)					
066	213.3 (13.00)			017	58.3 (3.56)					
072	227.1 (13.86)			020	63.8 (3.89)					
085	269.8 (16.40)			90 (1300)	75 (1100)					
				025	79.3 (4.84)					
				028	88.8 (5.42)					
				031	100.0 (6.10)					

High Pressure Double Vane Pump HT67EC Series

Ordering Code : Double Pump



1. Model :
Industrial - HT67EC SAE C 2 bolts mounting flange J744

2. Displacement P1
Volumetric displacement cm³/rec (in³/rev)
7E
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. Displacement P2
Volumetric displacement cm³/rec (in³/rev)
6C
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
1 - SAE CC Keyed Shaft
2 - non SAE Keyed Shaft
3 - SAE C Splined Shaft
4 - SAE CC 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

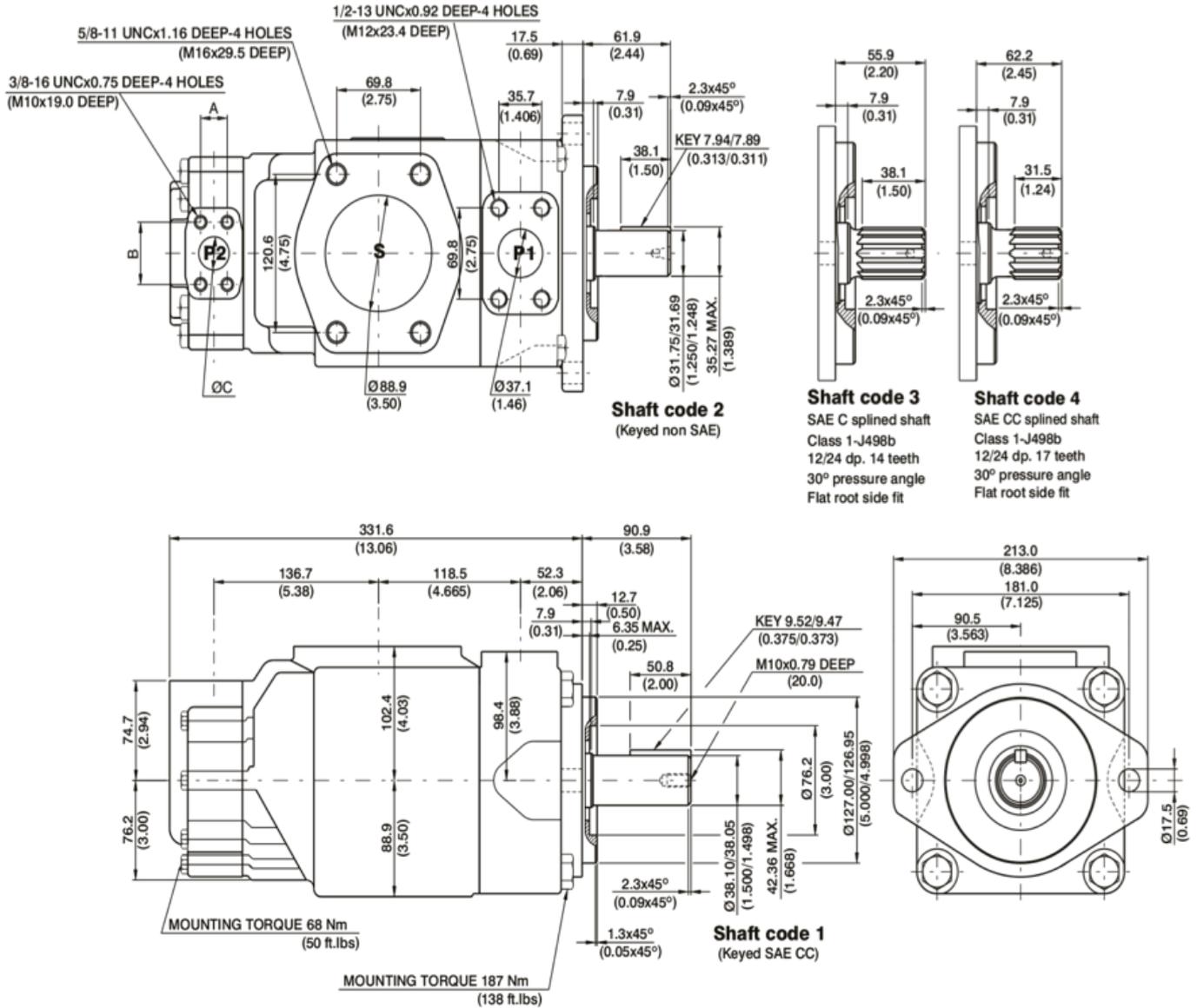
Code		4 bolt SAE flanges		
UNC	Metric	P1	P2	S
00	M0	1½"	1"	3½"
01	M1	1½"	3/4"	3½"

9. Modifications
Omit - Standard
718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT67EC Series

Installation Dimension mm (inch)

HT67EC



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)

Shaft torque limits [ml/rev x bar (in ³ /rev x psi)]	
Shaft	Vp x p max. (P1+P2)
1	72306 (64044)
2	34590 (30638)
3	61200 (54207)
4	76376 (67582)

High Pressure Double Vane Pump HT67EC Series

Performance Characteristics

HT67EC

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	042	8.07 in ³ /rev	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⁾	-
P2	003	0.66 in ³ /rev	5.14	3.61	-	2.11	8.45	-
	005	1.05 in ³ /rev	8.18	6.65	5.56	2.29	12.00	19.59
	006	1.30 in ³ /rev	10.13	8.60	7.51	2.40	14.28	23.57
	008	1.61 in ³ /rev	12.55	11.02	9.93	2.54	17.11	28.53
	010	2.08 in ³ /rev	16.22	14.69	13.60	2.76	21.38	36.00
	012	2.26 in ³ /rev	17.64	16.11	15.02	2.84	23.05	38.92
	014	2.81 in ³ /rev	21.88	20.35	19.26	3.09	27.99	47.56
	017	3.56 in ³ /rev	27.73	26.20	25.11	3.43	34.81	59.51
	020	3.89 in ³ /rev	30.34	28.81	27.42	3.58	37.86	64.85
	022	4.29 in ³ /rev	33.43	31.90	30.81	3.76	41.47	71.16
	025	4.84 in ³ /rev	37.71	36.18	35.09	4.01	46.46	79.90
	028	5.42 in ³ /rev	42.23	40.70	39.94 ²⁾	4.27	51.74	76.73 ²⁾
	031	6.10 in ³ /rev	47.56	46.03	45.27 ²⁾	4.58	57.95	86.06 ²⁾

1) 085 = 1300 PSI max. int. 2) 028 - 031 = 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 Double Vane Pump HT6EDM/ HT6EDP Series

Specification

HT6EDM, HT6EDP for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
042	132.3 (8.07)	240 (3500)	206 (3000)	014	47.6 (2.90)	240 (3500)	206 (3000)	400	2200	64.0 (140.8)
045	142.4 (8.70)			017	58.2 (3.55)					
050	158.5 (9.67)			020	66.0 (4.03)					
052	164.8 (10.00)			024	79.5 (4.85)					
062	196.7 (12.00)			028	89.7 (5.47)					
066	213.3 (13.00)			031	98.3 (6.00)					
072	227.1 (13.86)			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)	206 (3000)	160 (2300)					
				061	193.3 (11.8)					

High Pressure Double Vane Pump

HT6EDM/ HT6EDP Series

Ordering Code : Double Pump

HT6EDM - 042 - 014 - 1 R 00 - A - 00 - ..

1	2	3	4	5	6	7	8	9
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1. Model :

Mobile 1 Shaft seals (M) - HT6EDM
 Mobile 2 Shaft seals (P) - HT6EDP 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)
062	-	196.7 (12.00)
066	-	213.3 (13.00)
072	-	227.1 (13.86)

3. Displacement P2

Volumetric displacement cm³/rev (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)
061	-	193.3 (11.80)

4. Type of shaft

HT6EDM

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

HT6EDP

3 - non SAE 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
 M0 - Metric Port Connection

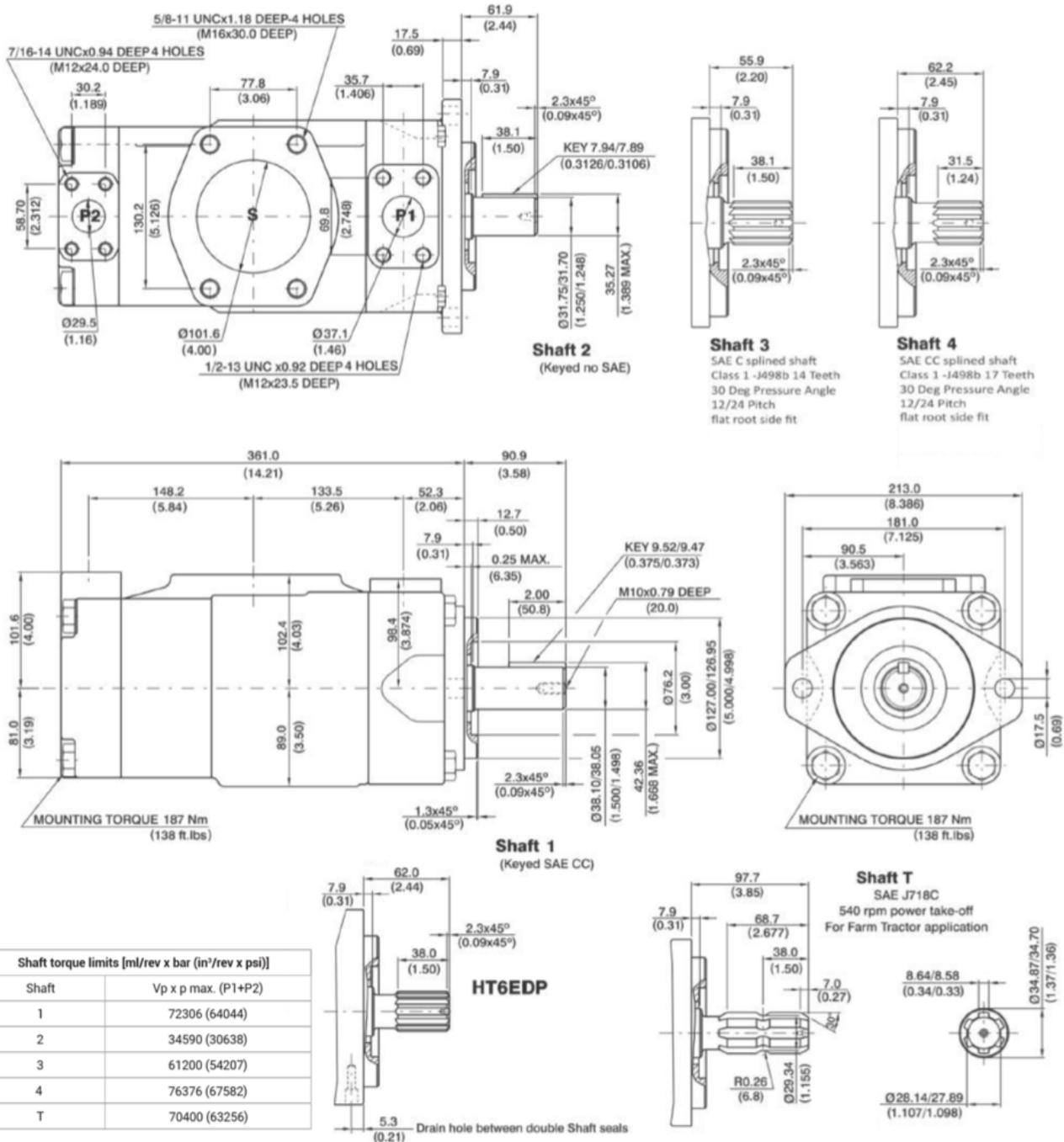
9. Modifications

Omit - Standard
 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump HT6EDM/ HT6EDP Series

Installation Dimension mm (inch)

HT6EDM, HT6EDP



High Pressure Double Vane Pump

HT6EDM/ HT6EDP Series

Performance Characteristics

HT6EDM, HT6EDP

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	042	8.07 in ³ /rev	62.92	60.37	58.52	8.09	78.44	133.80
	045	8.70 in ³ /rev	67.72	65.17	63.32	6.87	82.09	141.51
	050	9.67 in ³ /rev	75.38	72.83	70.98	7.32	91.02	157.15
	052	10.00 in ³ /rev	78.37	75.82	73.97	7.49	94.52	163.27
	062	12.00 in ³ /rev	93.54	90.99	89.14	8.38	112.22	194.25
	066	13.00 in ³ /rev	101.44	98.89	97.04	8.84	121.43	210.37
	072	13.86 in ³ /rev	108.00	105.45	103.60	9.22	129.09	223.77
P2	014	2.90 in ³ /rev	22.64	20.46	18.82	4.02	29.31	49.34
	017	3.55 in ³ /rev	27.68	25.50	23.86	4.31	35.20	59.64
	020	4.00 in ³ /rev	31.39	29.21	27.57	4.53	39.52	67.21
	024	4.80 in ³ /rev	37.82	35.63	33.99	4.91	47.02	80.32
	028	5.50 in ³ /rev	42.66	40.48	38.84	5.19	52.68	90.23
	031	6.00 in ³ /rev	46.75	44.57	42.93	5.43	57.45	98.58
	035	6.80 in ³ /rev	52.79	50.61	48.97	5.78	64.50	110.91
	038	7.30 in ³ /rev	57.21	55.03	53.39	6.04	69.66	119.94
	042	8.30 in ³ /rev	64.68	62.50	60.86	6.47	78.37	135.19
	045	8.90 in ³ /rev	69.29	67.11	65.47	6.74	83.74	144.61
	050	9.64 in ³ /rev	75.14	72.96	71.78 ¹⁾	7.08	90.58	134.54 ¹⁾
	061	11.8 in ³ /rev	90.98	84.55	80.87 ¹⁾	8.30	109.61	183.48 ¹⁾

1) 050-061 = 3000 PSI Max. int.

- Port connection can be furnished with metric threads.

High Pressure Double Vane Pump HT7ED/ HT7EDS Series

Specification

HT7ED, HT7EDS for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
042	132.3 (8.07)	240 (3500)	206 (3000)	014	47.6 (2.90)	300 (4350)	250 (3600)	600	2200	64.5 (141.9)
045	142.4 (8.70)			017	58.2 (3.55)					
050	158.5 (9.67)			020	66.0 (4.03)					
052	164.8 (10.00)			022	70.0 (4.27)					
054	173.8 (10.60)			024	79.5 (4.85)					
057	180.7 (11.02)			028	89.7 (5.47)					
062	196.7 (12.00)			031	98.3 (6.00)					
066	213.3 (13.00)			035	111.0 (6.77)					
072	227.1 (13.86)			038	120.3 (7.34)					
085	269.8 (16.40)			90 (1300)	75 (1100)					
				045	145.7 (8.89)	240 (3500)	206 (3000)			
				050	158.0 (9.64)	206 (3000)	160 (2300)			

High Pressure Double Vane Pump HT7ED/ HT7EDS Series

Ordering Code : Double Pump

HT7EDS - 042 - 014 - 1 R 00 - A - 00 - ..

1
2
3
4
5
6
7
8
9

1. Model :

Industrial - HT7ED ISO 2 bolts 3019-2 mounting flange 125 A2 HW
- HT7EDS SAE C 2 bolts mounting flange J744

5. Direction of rotation (Viewed from shaft end)

R - Turn right
L - Turn left

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)

6. Porting combination

00 - standard

7. Design letter

8. Port Connection (4 bolts SAE flange J518C)

00 - UNC Port Connection (Except HT7ED)
M0 - Metric Port Connection

9. Modifications

Omit - Standard
718 - Surface grinding the flange face for the manifold.

3. Displacement P2

Volumetric displacement cm³/rev (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)

4. Type of shaft

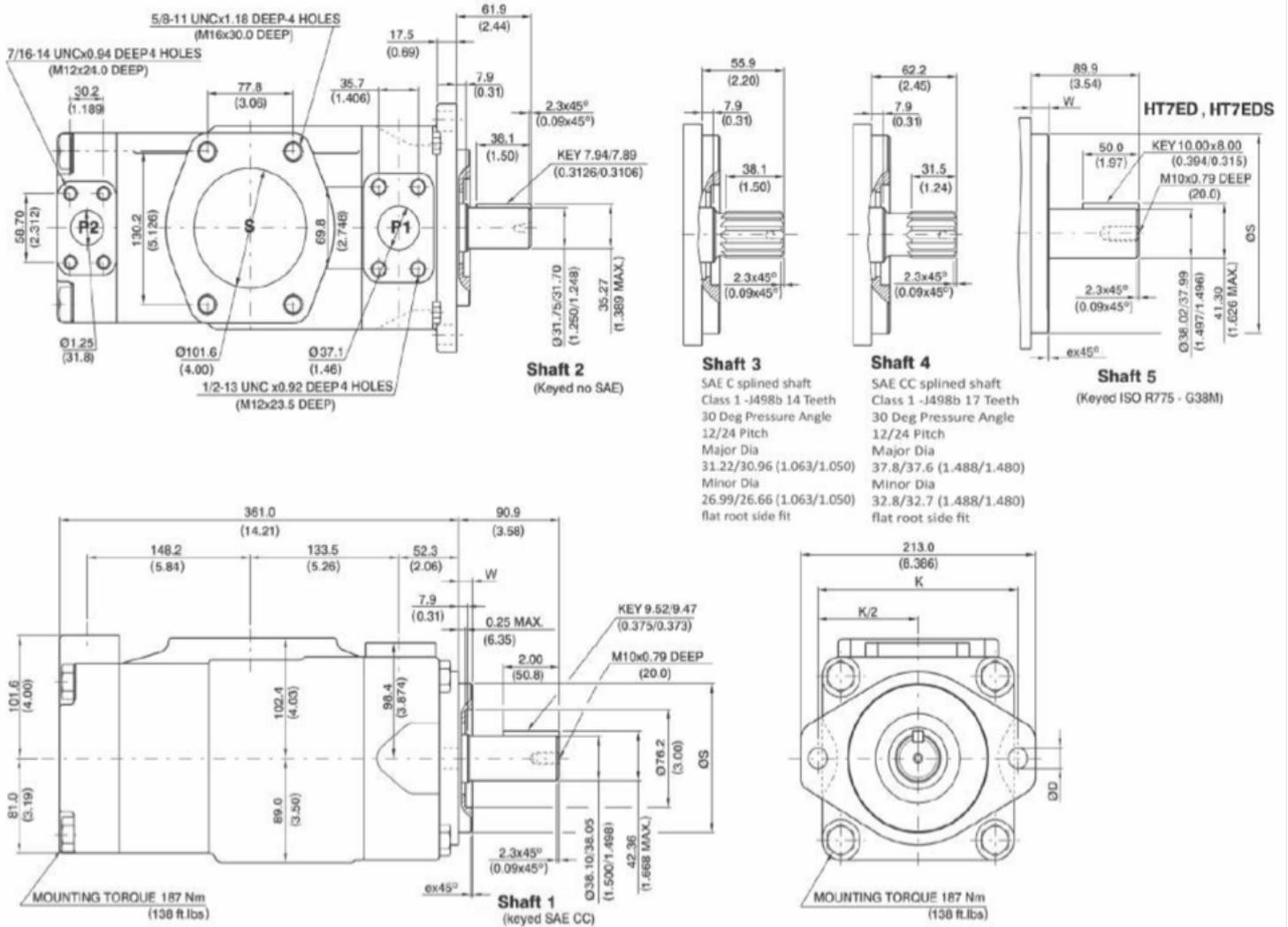
HT7ED, HT7EDS
5 - ISO R775-G38M Keyed Shaft

HT7EDS
1 - SAE CC Keyed Shaft
2 - non SAE Keyed Shaft
3 - SAE C Splined Shaft
4 - SAE CC Splined Shaft

High Pressure Double Vane Pump HT7ED/ HT7EDS Series

Installation Dimension mm (inch)

HT7ED, HT7EDS



Alternate mounting flange						
Model	ØS		ex 45°	W	K	ØD
	MAX.	MIN.				
HT7ED	124.99 (4.921)	124.94 (4.919)	2.0 (0.079)	9.49 (0.374)	180.0 (7.087)	18.0 (0.709)
HT7EDS	127.00 (5.00)	126.94 (4.998)	1.3 (0.051)	12.7 (0.50)	181.0 (7.126)	17.5 (0.689)

Shaft torque limits [ml/rev x bar (in ³ /rev x psi)]	
Shaft	Vp x p max. (P1+P2)
1	72372 (64039)
2	34590 (30638)
3	61200 (54207)
4	68568 (60673)
5	

High Pressure Double Vane Pump HT7ED/ HT7EDS Series

Performance Characteristics

HT7ED, HT7EDS

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	042	8.07 in ³ /rev	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⁾	-
			p = 0 PSI	p = 2000 PSI	p = 3630 PSI	p = 100 PSI	p = 2000 PSI	p = 3630 PSI
P2	014	2.68 in ³ /rev	20.92	19.18	17.81	3.46	27.77	47.03
	017	3.36 in ³ /rev	26.16	24.41	23.04	3.77	33.88	57.71
	020	4.03 in ³ /rev	31.39	29.64	28.27	4.07	39.98	68.39
	022	4.29 in ³ /rev	33.43	31.69	30.32	4.19	42.37	72.57
	024	4.95 in ³ /rev	38.57	36.82	35.45	4.49	48.36	83.06
	028	5.49 in ³ /rev	42.80	41.06	39.69	4.74	53.30	91.07
	031	6.05 in ³ /rev	47.18	45.43	44.06	4.99	58.41	100.63
	035	6.92 in ³ /rev	53.93	52.18	50.81	5.39	66.29	114.42
	038	7.36 in ³ /rev	57.35	55.61	54.24	5.59	70.28	121.42
	042	8.39 in ³ /rev	65.39	63.65	62.28	6.05	79.66	137.83
	045	8.89 in ³ /rev	69.29	67.11	65.31	6.74	83.75	145.79
	050	9.64 in ³ /rev	75.14	72.96	71.78 ²⁾	7.08	90.58	134.50 ²⁾

1) 085 = 1300 PSI Max. int. 2) 050 = 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 Double Vane Pump HT7EE/ HT7EES Series

Specification

HT7EE, HT7EES for Double pump

Shaft End Pump				Cover End Pump				Min. speed rpm	Max. speed rpm	Weight kg (lb)
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)			
042	132.3 (8.07)	240 (3500)	206 (3000)	042	132.3 (8.07)	240 (3500)	206 (3000)	600	2200	95.2 (209.4)
045	142.4 (8.70)			045	142.4 (8.70)					
050	158.5 (9.67)			050	158.5 (9.67)					
052	164.8 (10.00)			052	164.8 (10.00)					
054	173.8 (10.60)			054	173.8 (10.60)					
057	180.7 (11.02)			057	180.7 (11.02)					
062	196.7 (12.00)			062	196.7 (12.00)					
066	213.3 (13.00)			066	213.3 (13.00)					
072	227.1 (13.86)	072	227.1 (13.86)	90 (1300)	75 (1100)					
085	269.8 (16.40)	085	269.8 (16.40)							

High Pressure Double Vane Pump

HT7EE/ HT7EES Series

Ordering Code

HT7EES - 052 - 042 - 1 R 00 - A 0 - 00 - ..

1
2
3
4
5
6
7
8
9
10

1. Model :

- Industrial - HT7EE ISO 4 bolts 3019-2 mounting flange 250 B4 HW
- HT7EES SAE E 4 bolts mounting flange J744

2. Displacement P1

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. Displacement P2

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)

4. Type of shaft

- HT7EE, HT7EES
- 2 - ISO 3019-2-G45N Keyed Shaft
- HT7EES
- 1 - SAE CC Keyed Shaft
- 3 - SAE CC Splined Shaft
- 4 - SAE D&E Splined Shaft
- 5 - SAE D&E Keyed Shaft

5. Direction of rotation (view on shaft end)

- R - Turn right
- L - Turn left

6. Porting combination (see page Porting Diagrams)

- 00 - standard

7. Design letter

8. Coupling adaptor

- 0 - none
- 2 - SAE B
- 3 - SAE BB
- * for SAE C, please contact HOF

9. Port Connection (4 bolts SAE flange J518C)

- 00 - UNC Port Connection (Except HT7EE)
- M0 - Metric Port Connection

10. Modifications

- Omit - Standard
- 718 - Surface grinding the flange face for the manifold.

High Pressure Double Vane Pump

HT7EE/ HT7EES Series

Performance Characteristics

HT7EE, HT7EES

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 & P2	042	8.07 in ³ /rev	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
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	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⁾	-

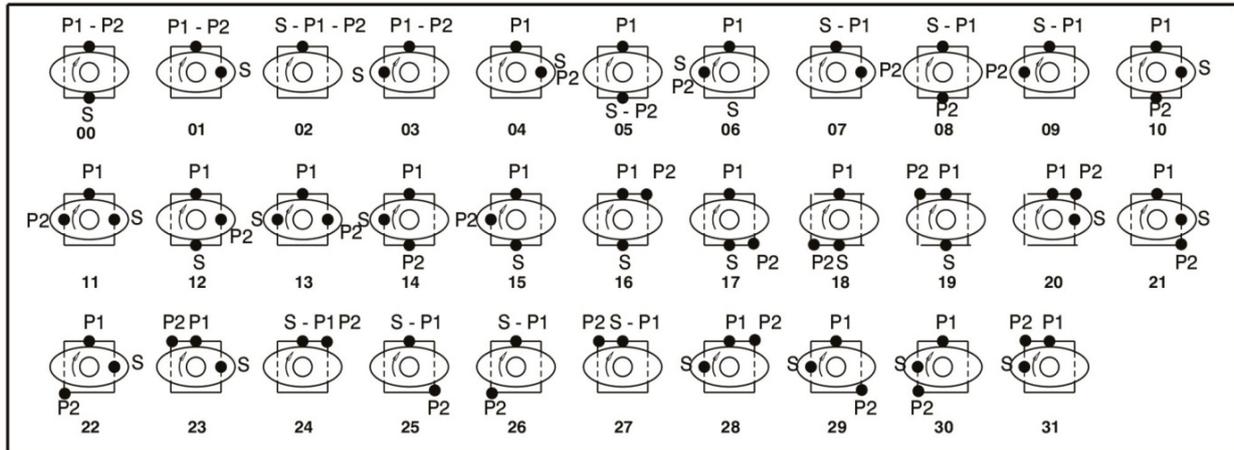
1) 085 = 1300 PSI max. int

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

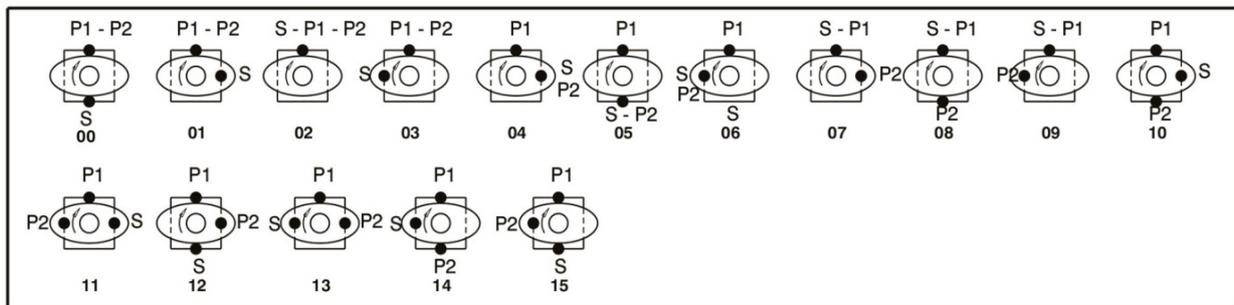
- Port connection can be furnished with metric threads.

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

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