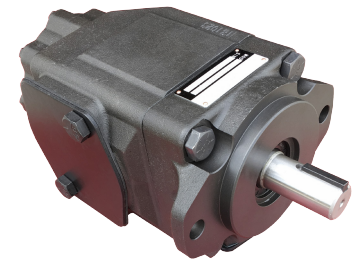
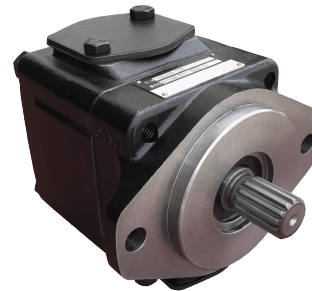
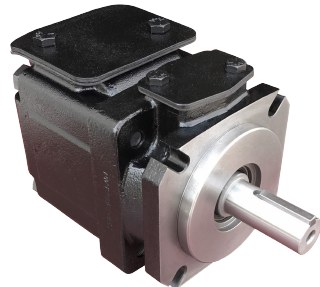
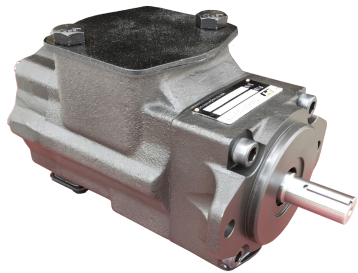


# VANE PUMPS



## **WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Hyflow Southeast Inc., its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

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## HT6C, HT6CM

### MODEL CODE

HT6C \* \* - \*22 - 1 R 00 - B 1 \*

Series \_\_\_\_\_

\*M = Mobile (\*omit for Industrial) \_\_\_\_\_

\*Y = Metric port connection, omit for UNC \_\_\_\_\_

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
003/B03/R03	= 0.66 (10.8)	017/B17/R17	= 3.56 (58.3)
005/B05/R05	= 1.05 (17.2)	020/B20/R20	= 3.89 (63.8)
006/B06/R06	= 1.30 (21.3)	022/B22/R22	= 4.29 (70.3)
008/B08/R08	= 1.61 (26.4)	025/B25/R25	= 4.84 (79.3)
010/B10/R10	= 2.08 (34.1)	028/B28/R28	= 5.42 (88.8)
012/B12/R12	= 2.26 (37.1)	031/B3/R311	= 6.10 (100.0)
014/B14/R14	= 2.81 (46.0)		

(Select 'B\*\*' for Mobile and Industrial bi-directional)  
(Select 'R\*\*' for Mobile-spring assisted)

Type of Shaft \_\_\_\_\_

1 = Keyed (SAE B)  
2 = Keyed (no SAE)  
3 = Splined (SAE B)  
4 = Splined (SAE B-B)

Modification \_\_\_\_\_

Seal class \_\_\_\_\_  
1 = S1 - BUNA N  
4 = S4 - EPDM  
5 = S5 - VITON

Design letter \_\_\_\_\_  
B = Industrial      C = Mobile

Porting combination: (00 = Standard)

00  
P

01  
P-S

02  
P

03  
P

Direction of rotation \_\_\_\_\_  
R = Clockwise  
L = Counter - clockwise

### To change porting position, follow the steps below:

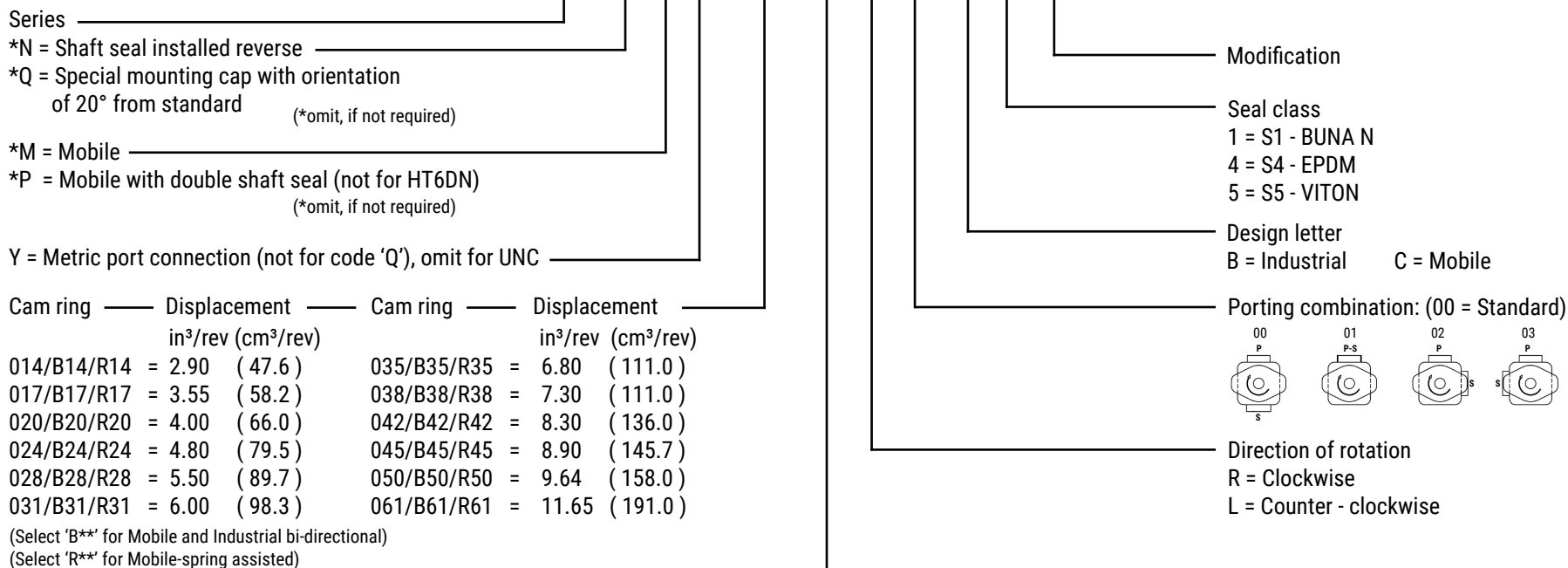
Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.

## HT6D, HT6DM, HT6DP

### MODEL CODE

HT6D \* \* \* - \*42 - 1 R 00 - B 1 - \*



Type of Shaft	Type of Shaft	Type of Shaft
HT6D/HT6DN/HT6DQ 1 = Keyed (SAE - C) 2 = Keyed (no SAE) 3 = Splined (SAE - C) 4 = Splined (no SAE)	HT6DM/HT6DNM/HT6DQM 1 = Keyed (SAE - C) 2 = Keyed (no SAE) 3 = Splined (SAE - C) 4 = Splined (no SAE) T = Splined (SAE j718c)	HT6DP/HT6DQP 3 = Splined (no SAE)

### To change porting position, follow the steps below:

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.

## HT6E, HT6EM, HT6EP

### MODEL CODE

HT6E \* \* - \*66 - 1 R 00 - A 1 \*

Series \_\_\_\_\_  
 \*M = Mobile \_\_\_\_\_  
 \*P = Mobile with double shaft seal  
 (\*omit for Industrial)

Y = Metric port connection, omit for UNC

Cam ring	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)	Cam ring	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
042/B42/R42	= 8.07 ( 132.30 )	057/B57/R57	= 11.02 ( 180.70 )
045/B45/R45	= 8.70 ( 142.40 )	062/B62/R62	= 12.00 ( 196.70 )
050/B50/R50	= 9.67 ( 158.50 )	066/B66/R66	= 13.00 ( 213.30 )
052/B52/R52	= 10.00 ( 164.80 )	072/B72/R72	= 13.86 ( 227.10 )
		085/B85/R85	= 16.40 ( 269.80 )

(Select '0\*\*' for Standard and Mobile)  
 (Select 'B\*\*' for Mobile and Industrial bi-directional)  
 (Select 'R\*\*' for Mobile-spring assisted)

Type of Shaft	Type of Shaft	Type of Shaft
HT6E 1 = Keyed (SAE - CC) 2 = Keyed (no SAE) 3 = Splined (SAE - C) 4 = Splined (SAE - CC)	HT6EM 1 = Keyed (SAE - CC) 2 = Keyed (no SAE) 3 = Splined (SAE - C) 4 = Splined (SAE - CC) T = Splined (SAE J718c)	HT6EP 3 = Splined (no SAE)

Modification

Seal class  
 1 = S1 - BUNA N  
 4 = S4 - EPDM  
 5 = S5 - VITON

Design letter  
 A = Industrial      B = Mobile

Porting combination: (00 = Standard)

Direction of rotation  
 R = Clockwise  
 L = Counter - clockwise

### To change porting position, follow the steps below:

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.

## HT7B, HT7BS

### MODEL CODE

HT7B/HT7BS - B10 - 1 R 00 - A 1 M0 -

Series \_\_\_\_\_  
 HT7B series - 100 A2 HW  
 ISO 2 bolts 3019 - 2 mounting flange  
 HT7BS series - SAE B 2 bolts  
 Mounting flange J744c

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
B02	= 0.35 ( 5.7 )	B09	= 1.71 ( 28.0 )
B03	= 0.60 ( 9.8 )	B10	= 1.94 ( 31.8 )
B04	= 0.78 ( 12.8 )	B11	= 2.13 ( 34.9 )
B05	= 0.97 ( 15.9 )	B12	= 2.50 ( 40.9 )
B06	= 1.21 ( 19.8 )	B14	= 2.75 ( 45.1 )
B07	= 1.37 ( 22.5 )	B15	= 3.05 ( 50.0 )
B08	= 1.52 ( 24.9 )		

### Type of Shaft

HT7BS  
 1 = Keyed (SAE - B)  
 3 = Splined (SAE B)  
 4 = Splined (SAE BB)

HT7B - HT7BS  
 2 = Keyed (ISO R775)

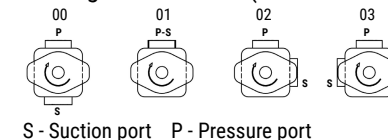
Modification  
 Mounting w/ connection variables  
 4 bolts SAE flange (J518C)

	UNC HT7BS		METRIC HT7B-HT7BS	
	00	01	M0	M1
P	1"	3/4"	1"	3/4"
S	1 1/2"			

Seal class  
 1 = S1 - BUNA N  
 4 = S4 - EPDM  
 5 = S5 - VITON

Design letter

Porting combination: (00 = Standard)



Direction of rotation  
 R = Clockwise  
 L = Counter - clockwise

### To change porting position, follow the steps below:

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.

## HT7D, HT7DS

### MODEL CODE

HT7D/HT7DS - B42 - 1 R 00 - A 1 M0 -

Series \_\_\_\_\_  
 HT7D - series - 125 A2 HW  
 ISO 2 bolts 3019-2 mounting flange  
 HT7DS - series - SAE C 2 bolts  
 Mounting flange J744c

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
B14	= 2.68 (43.9)	B31	= 6.05 (28.0)
B17	= 3.36 (55.0)	B35	= 6.92 (113.4)
B20	= 4.03 (66.0)	B38	= 7.36 (120.6)
B22	= 4.29 (70.3)	B42	= 8.39 (137.5)
B24	= 4.95 (81.3)	045	= 8.89 (145.7)
B28	= 5.49 (89.9)	050	= 9.64 (157.9)

Type of Shaft \_\_\_\_\_

HT7DS  
 1 = Keyed (SAE - C)  
 2 = Keyed (no SAE)  
 3 = Splined (SAE - C)  
 4 = Splined (no SAE)

HT7DS - HT7D  
 5 - Keyed (ISO 3019-2-G32M)

Modification  
 Mounting w/ connection variables  
 4 bolts SAE flange (J518C)

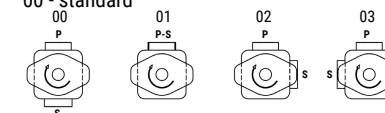
P = 1" 1/4		S = 2"	
UNC METRIC			
HT7D		M0	
HT7DS	00	M0	Y0 <sup>1)</sup>

1) 250 bar max. int.

Seal class  
 1 = S1 - BUNA N  
 4 = S4 - EPDM  
 5 = S5 - VITON

Design letter

Porting combination: (00 = Standard)  
 00 - standard



S - Suction port P - Pressure port

Direction of rotation (view on shaft end)  
 R = Clockwise  
 L = Counter - clockwise

### To change porting position, follow the steps below:

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.



## HT7DSW

### MODEL CODE

HT7DSW - \*42 - X R 00 - A 1 W1 -

Series \_\_\_\_\_

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
014/B14	= 2.68 ( 43.9 )	031/B31	= 6.05 ( 99.1 )
017/B17	= 3.36 ( 55.0 )	035/B35	= 6.92 ( 113.4 )
020/B20	= 4.03 ( 66.0 )	038/B38	= 7.36 ( 120.6 )
022/B22	= 4.29 ( 70.3 )	042/B42	= 8.39 ( 137.5 )
024/B24	= 4.95 ( 81.3 )	045/B45	= 8.89 ( 145.7 )
028/B28	= 5.49 ( 89.9 )	050/B50	= 9.64 ( 157.9 )

Type of Shaft \_\_\_\_\_

X = Keyed (SAE - C)
3 = Splined (SAE - C)

Modification  
IM 1115 - Housing and mounting flange fluid connections are in the same plane

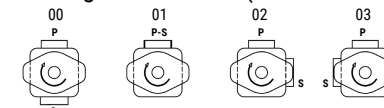
Mounting w/ connection variables  
4 bolts SAE flange (J518)

P = 1-1/4"	S = 2-1/2"	
	UNC	METRIC
HT7DSW	W1	M1

Seal class  
1 = S1 - BUNA N  
4 = S4 - EPDM  
5 = S5 - VITON

Design letter

Porting combination: (00 = Standard)



S - Suction port P - Pressure port

Direction of rotation (view on end shaft)  
R = Clockwise  
L = Counter - clockwise

#### To change porting position, follow the steps below:

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.

## HT7E, HT7ES

### MODEL CODE

HT7E/HT7ES - 066 - 1 R 00 - A 1 M0 \*

Series \_\_\_\_\_  
 HT7E - series - 125 A2 HW  
 ISO 2 bolts 3019 - 2 mounting flange  
 HT7ES - series - SAE C 2 bolts  
 Mounting flange J744c

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
042	= 8.07 (132.30)	057	= 11.02 (180.70)
045	= 8.70 (142.40)	062	= 12.00 (196.70)
050	= 9.67 (158.50)	066	= 13.00 (213.30)
052	= 10.00 (164.80)	072	= 13.86 (227.10)
054	= 10.43 (170.90)	085	= 16.40 (269.80)

Type of Shaft \_\_\_\_\_

HT7ES  
 1 = Keyed (SAE - CC)  
 2 = Keyed (no SAE)  
 3 = Splined (SAE - C)  
 4 = Splined (SAE - CC)

HT7ES - HT7E  
 5 = Keyed (ISO R775-G38M)

Modification

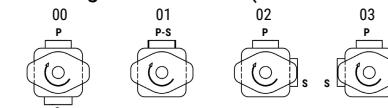
Mounting w/ connection variables  
 4 bolts SAE flange (J518C)

P = 1" 1/2		S = 3"	
	UNC	METRIC	
VT7E		M0	
VT7ES	00	M0	

Seal class  
 1 = S1 - BUNA N  
 4 = S4 - EPDM  
 5 = S5 - VITON

Design letter

Porting combination: (00 = Standard)



S - Suction port P - Pressure port

Direction of rotation

R = Clockwise  
 L = Counter - clockwise

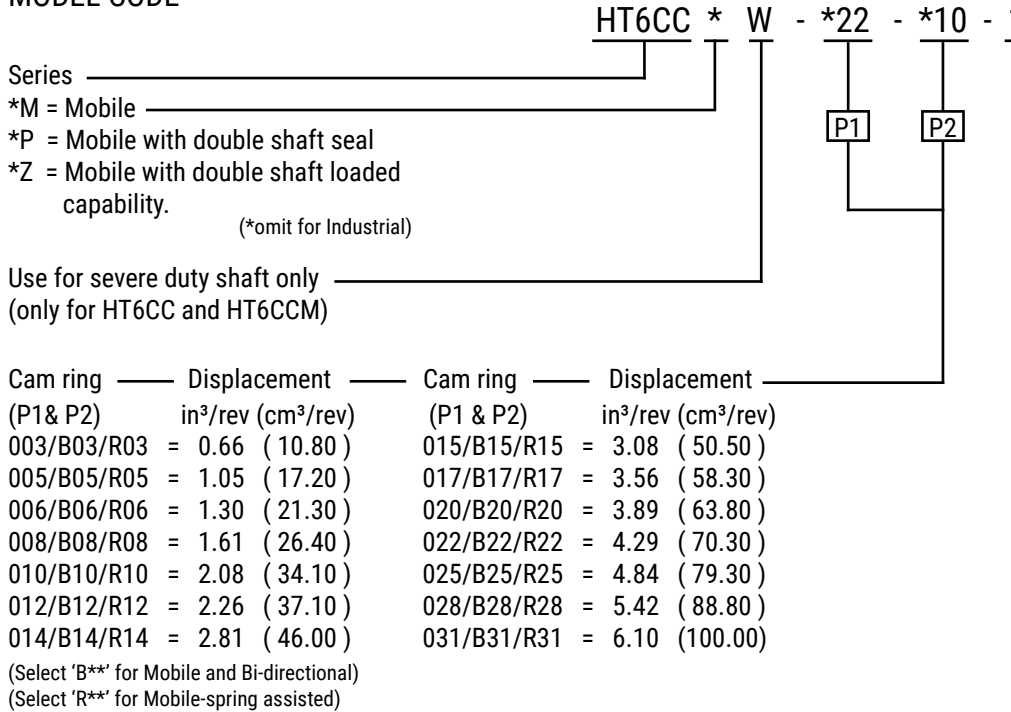
### To change porting position, follow the steps below:

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.

## HT6CC, HT6CCM, HT6CCP, HT6CCZ

### MODEL CODE



Type of Shaft

**HT6CC/T6CCM**  
1 = Keyed (no SAE)  
3 = Splined (SAE-BB)  
5 = Splined (SAE-B)

Type of Shaft

**HT6CCMW**  
2 = Keyed (SAE-BB)  
R = Keyed special  
X = Keyed special  
W = Keyed special  
V = Keyed special  
T = Splined (SAE j718c)  
Q = Splined (SAE-C)  
S = Splined (DIN 5462)

Type of Shaft

**HT6CCP**  
3 = Splined (no SAE)  
4 = Splined (SAE-BB)  
6 = Splined (no SAE)  
S = Splined (DIN 5462)

**HT6CCZ**  
X = Keyed Non-SAE  
W = Keyed Non-SAE  
V = Keyed Non-SAE  
S = Splined (DIN 5462)

### Modification

Port connection variables  
SAE 4 bolt flange (J518c)

Code				
UNC	METRIC	P1	P2	S
00	OM	1"	1"	3"
01	W0	1"	3/4"	3"
10	1M	1"	1"	2½"
11	W1	1"	3/4"	2½"

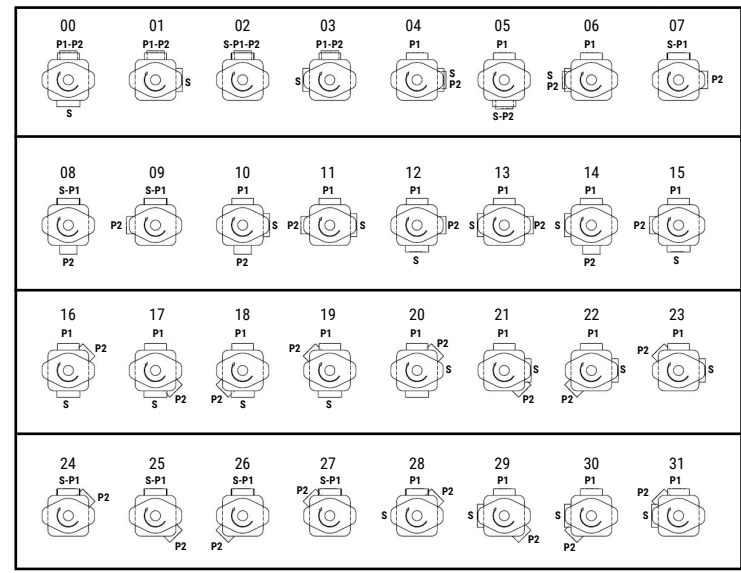
### Seal class

- 1 = S1 - BUNA N
- 4 = S4 - EPDM
- 5 = S5 - VITON

### Design letter

- A = HT6CCZ
- C = Industrial
- D = Mobile

### Porting combination: (00 = Standard)

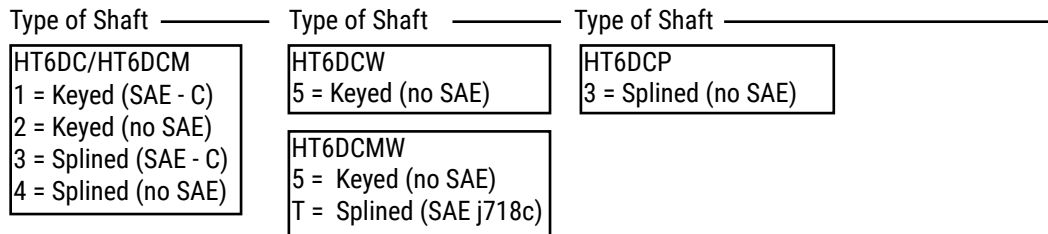
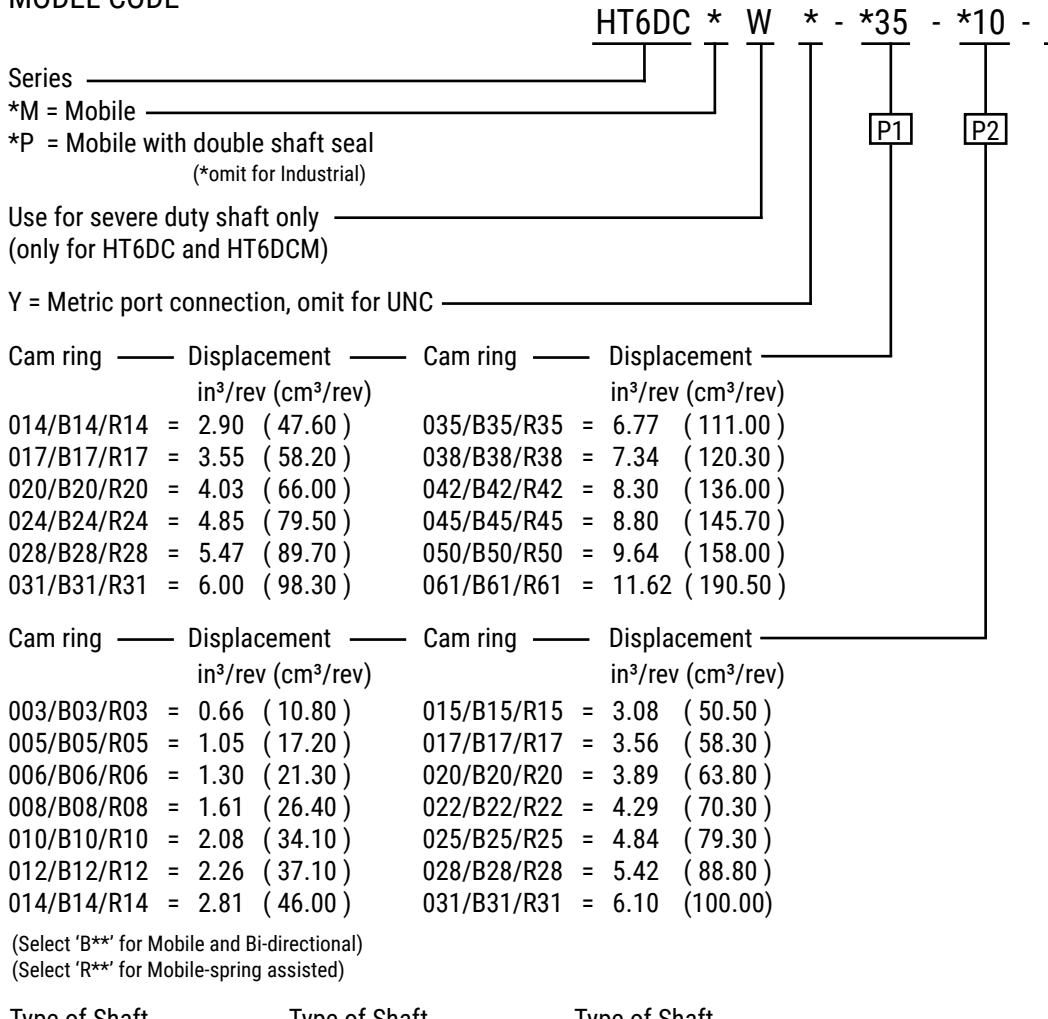


### Direction of rotation

- R = Clockwise
- L = Counter - clockwise

## HT6DC, HT6DCM, HT6DCP

### MODEL CODE



HT6DC \* W \* - \*35 - \*10 - 1 R 00 - C 1 00 - \*



Modification

Mounting w/ connection variables

	UNC		METRIC	
	00	01	M0	M1
P2	1"	3/4"	1"	3/4"

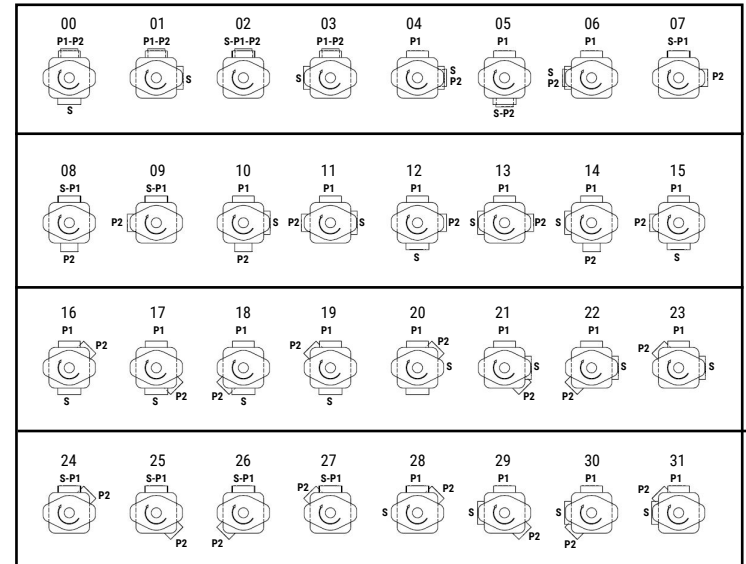
Seal class

- 1 = S1 (for mineral oil)
- 4 = S4 (for fire resistant fluids)
- 5 = S5 (for mineral oil and fire resistant fluids)

Design letter

- B = Industrial
- C = Mobile

Porting combination: (00 = Standard)

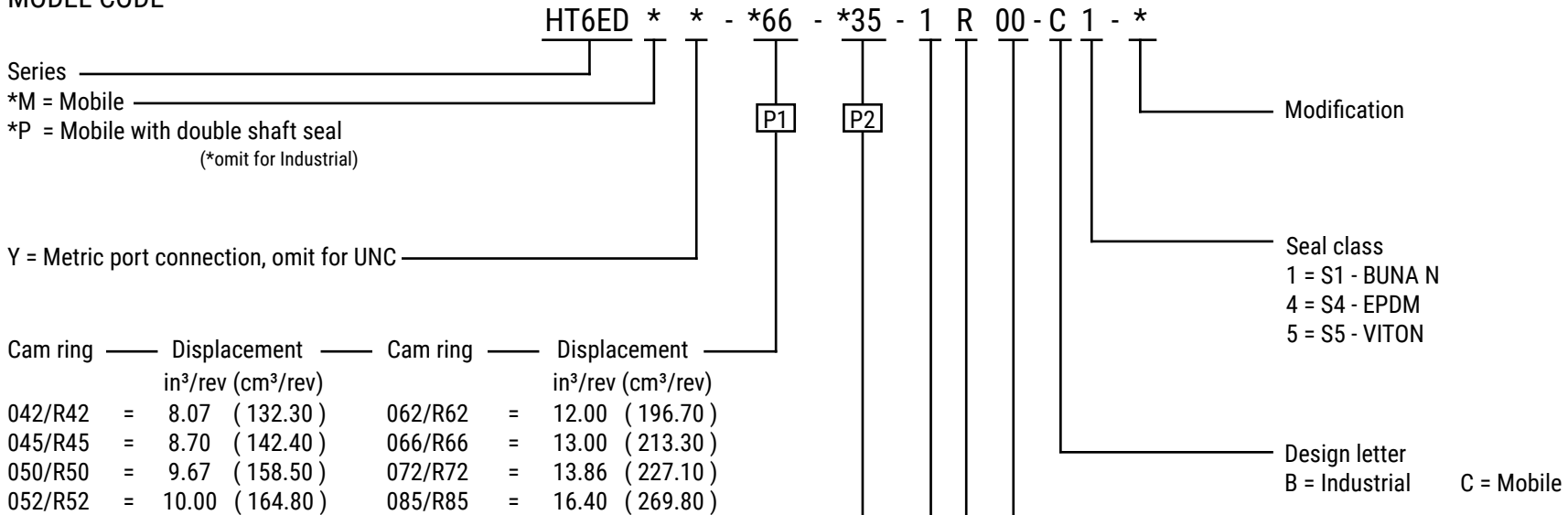


Direction of rotation

- R = Clockwise
- L = Counter - clockwise

## HT6ED, HT6EDM, HT6EDP

### MODEL CODE



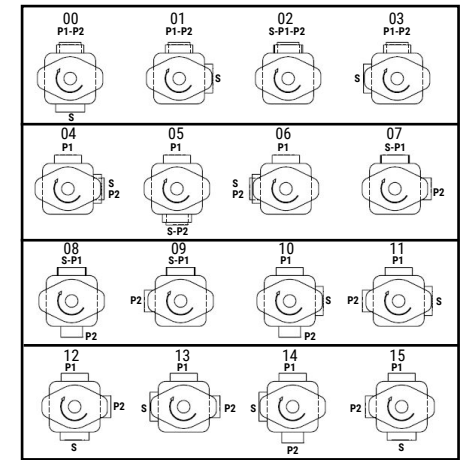
(Select 'R\*\*' for Mobile-spring assisted)

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
014/B14/R14	= 2.90 (47.60)	038/B38/R38	= 7.30 (120.30)
020/B20/R20	= 4.00 (66.00)	042/B42/R42	= 8.30 (136.00)
024/B24/R24	= 4.85 (79.50)	045/B45/R45	= 8.90 (145.70)
028/B28/R28	= 5.00 (89.70)	050/B50/R50	= 9.64 (158.00)
031/B31/R31	= 6.00 (98.30)		
035/B35/R35	= 6.80 (111.00)		

(Select 'B\*\*' for Mobile and Bi-directional)  
(Select 'R\*\*' for Mobile-spring assisted)

Type of Shaft	Type of Shaft	Type of Shaft
<b>HT6ED</b> 1 = Keyed (SAE - CC) 2 = Keyed (no SAE) 3 = Splined (SAE - C) 4 = Splined (SAE - CC)	<b>HT6EDM</b> 1 = Keyed (SAE - CC) 2 = Keyed (no SAE) 3 = Splined (SAE - C) 4 = Splined (no SAE) T = Splined (SAE J718c)	<b>HT6EDP</b> 3 = Splined (no SAE)

### Porting combination: (00 = Standard)



P - Pressure S - Suction

Direction of rotation  
R = Clockwise  
L = Counter - clockwise

## HT7ED, HT7EDS

### MODEL CODE

HT7ED/HT7EDS - 042 - B22 - 1 R 00 - A 1 - M0 - ..

Series \_\_\_\_\_  
 HT7ED - ISO - 2 bolts 3019-2  
 Mounting flange 125 B4 HW  
 HT7EDS - SAE - C 2 Bolts  
 Mounting flange J744

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
042	= 8.07 (132.30)	057	= 11.02 (180.70)
045	= 8.70 (142.40)	062	= 12.00 (196.70)
050	= 9.67 (158.50)	066	= 13.00 (213.30)
052	= 10.00 (164.80)	072	= 13.86 (227.10)
054	= 10.43 (170.90)	085	= 16.40 (269.80)

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
B14	= 2.68 (43.9)	B31	= 6.05 (99.1)
B17	= 3.36 (55.0)	B35	= 6.92 (113.4)
B20	= 4.03 (66.0)	B38	= 7.36 (120.6)
B22	= 4.29 (70.3)	B42	= 8.39 (137.5)
B24	= 4.95 (81.3)	045	= 8.89 (145.7)
B28	= 5.49 (89.9)	050	= 9.64 (157.9)

### Type of Shaft

**HT7EDS**  
 1 = Keyed (SAE - CC)  
 2 = Keyed (no SAE)  
 3 = Splined (SAE - C)  
 4 = Splined (SAE - CC)

**HT7ED-HT7EDS**  
 5 = Keyed (ISO/R775 - G38M)



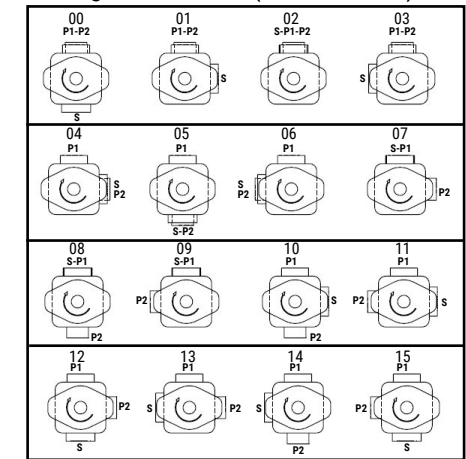
Modification  
 Mounting w/ connection variables  
 4 bolts SAE flange J518c

P1=1½"	P2=1¼"	S=4"
HT7EDS	HT7ED-HT7EDS	
UNC	METRIC	
01	M1	

Seal class  
 1 = S1 - BUNA N  
 4 = S4 - EPDM  
 5 = S5 - VITON

Design letter

Porting combination: (00 = Standard)



P - Pressure S - Suction

Direction of rotation  
 R = Clockwise  
 L = Counter - clockwise

## HT7EE, HT7EES

### MODEL CODE

HT7EE/HT7EES - 066 - 045 - 1 R 00 - A 1 0 00 -

Series \_\_\_\_\_  
 HT7EE Series - 250 B4HW  
 ISO 3019 - 2 mounting flange  
 HT7EES Series - SAE 4 bolts  
 Mounting flange J744c

Cam ring	Displacement	Cam ring	Displacement
	in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		in <sup>3</sup> /rev (cm <sup>3</sup> /rev)
042	= 8.07 (132.3)	057	= 11.18 (183.2)
045	= 8.77 (142.5)	062	= 12.0 (196.6)
050	= 9.67 (158.5)	066	= 13.0 (213.0)
052	= 10.0 (163.8)	072	= 13.86 (227.1)
054	= 10.43 (170.9)	085	= 16.40 (268.7)

Type of Shaft \_\_\_\_\_

HT7EE  
 2 - Keyed G45N (ISO 3019-2)

HT7EES  
 1 - Keyed (SAE CC)  
 3 - Splined (SAE CC)  
 4 - Splined (SAE D&E)  
 5 - Keyed (SAE D & E)

To change porting position, follow the steps below:

1. Secure pump and remove the 4 bolts from the mounting flange.
2. Turn the mounting flange 1 to 2 mm away from the housing. Insert one bolt halfway to mounting flange.
3. Install a wrench between the shaft and the bolt and turn in the desired way, so that the required position of the P1 port, with respect to suction is obtained.
4. Reinstall and tighten the bolts to the specified mounting torque as provided on page 2.
5. Follow the same procedure for changing the P2 port position.

Instruction: Remove the mounting flange/end cap 1 to 2 mm only (do not completely remove the mounting flange/end cap) to avoid the cartridge pin from moving out of the housing dowel pin hole. Make sure that there are no foreign piece objects that enters into the gap to avoid leakage. If it is difficult to turn mounting flange/end cap put some hydraulic oil in to the pressure port to lubricate the pressure port seals.



Modification

Mounting w/ connection variables  
 4 bolts SAE flange (J518c)

	UNC	METRIC
HT7EE		MO
HT7EES	00	MO

Coupling Adaptor

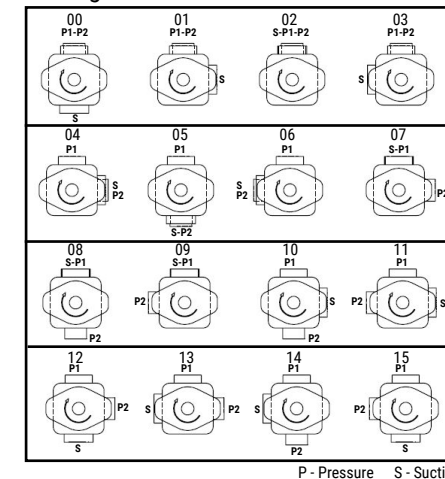
- 0 = None
- 2 = SAE 'B'
- 3 = SAE 'BB'

Seal class

- 1 = S1 - BUNA N
- 4 = S4 - EPDM
- 5 = S5 - VITON

Design letter

Porting combination



Direction of rotation (view on shaft end)

R = Clockwise

L = Counter - clockwise

## **HYFLOW SOUTHEAST, INC. VANE PUMP WARRANTY**

The Hyflow Southeast vane pump and other parts covered in this catalog are warranted for a period of (1) one year (12 months) from the date of service or 1-1/2 years (18 months) from date of build against any defect in material and workmanship which existed at the time of sale by Hyflow Southeast Inc., according to the following provisions, subject to the requirements that the vane pump must be used only in the appropriate applications and following the Installation and Owner's Manual instructions.

If during the warranty period the PTO fails due to a defect in any part in material or workmanship that existed at the time of the sale by Hyflow Southeast Inc., the defective part will be repaired or replaced, at the discretion of Hyflow Southeast Inc., at no charge, if the defective part is returned to Hyflow Southeast Inc. with transportation prepaid. Authorization from your sales representative is required to initiate the warranty.

**WARNING:** The above warranty shall terminate if any alterations or repairs are made to the vane pump other than at Hyflow Southeast Inc.

The foregoing warranty is in lieu of all other obligations and liabilities, including negligence and all warranties of merchantability and suitability, expressed or implied, and state Hyflow Southeast' entire and exclusive liability and buyer's exclusive remedy for any claim of damages in connection with the sale, repair or replacement of the above goods, their design, installation or operation. Hyflow Southeast Inc. will in no event be liable for any direct, indirect, special, incidental or consequential damages whatsoever, and our liability under no circumstances will exceed the contract price for the goods for which liability is claimed.

Hyflow Southeast Inc. is not liable for any repair related cost incurred to the Buyer at any time if the repair is conducted by the buyer without written authorization from Hyflow Southeast Inc.





**HYFLOW®**

**CALIFORNIA**

**2134 S. Green Privado  
Ontario, CA 91761  
(909) 628-9866**

**GEORGIA**

**241 Industrial Park Rd  
Baldwin, GA 30511  
706-686-4198**