



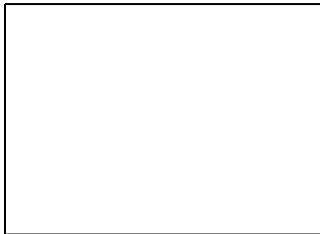
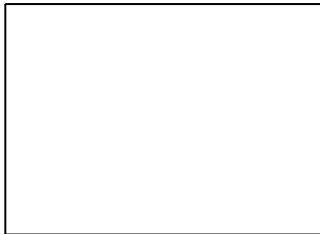
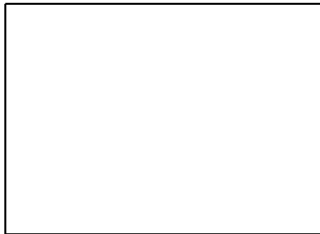
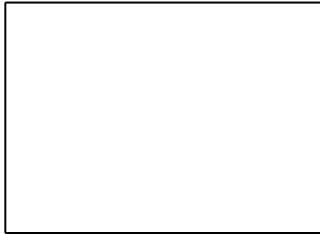
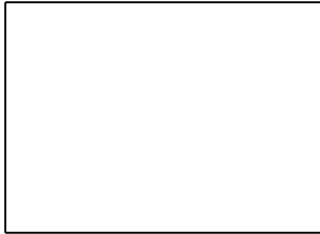
VELJAN

Service Information

SS4 - 00146

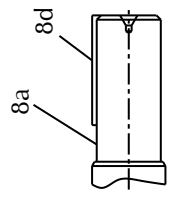
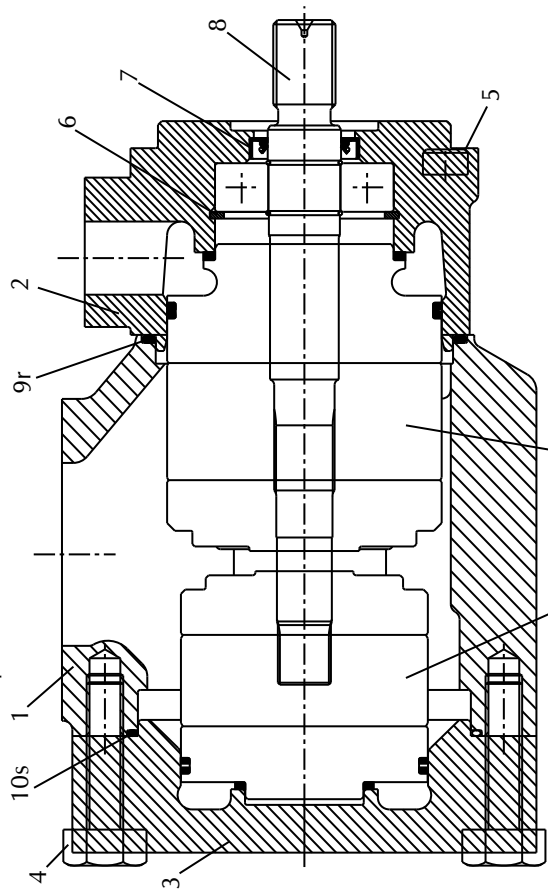
VT6CB

Double vane pump

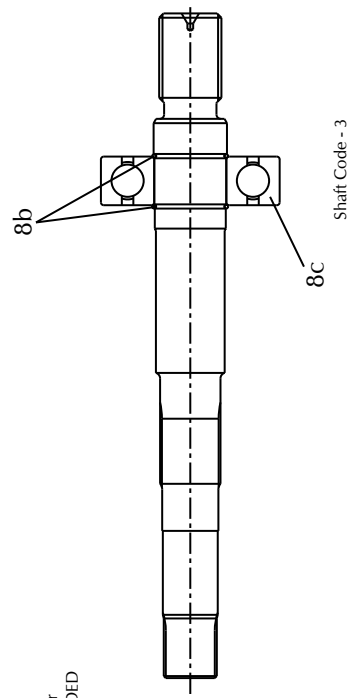


PHOTO

Bold printed are recommended repair kits and assemblies



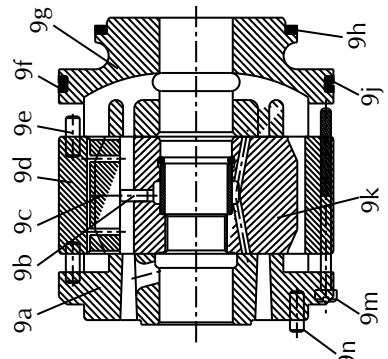
Shaft Code - 1



Shaft Code - 3

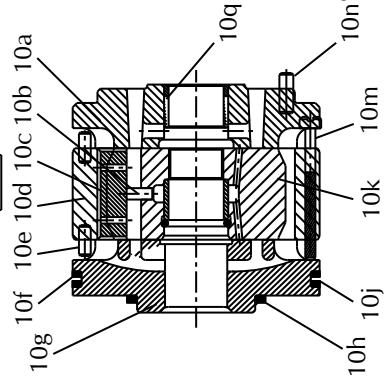
ITEM 9r INCLUDED

P1



ITEM 10s INCLUDED

P2



Item pos.	Description	Part No.		Qty
		VT6CB (Standard)	VT6CB (Bi-dir plates)	
1	Housing (UNC)	C-EX-00204	C-EX-00204	1
	Housing (Metric)	C-EX-00214	C-EX-00214	
2	Mounting flange (UNC)	V034-59107	V034-59107	1
	Mounting flange (Metric)	H-034-66690	H-034-66690	
	Mounting flange SAE 16 (1 5/16-12 UNF)	C-SK-01154	C-SK-01154	
3	End cap (UNC)	C-EX-00431	C-EX-00431	1
	End cap (Metric)	C-EX-00444	C-EX-00444	
	End cap (3/4-16 UNF)	C-EX-00445	C-EX-00445	
4	Mounting Screw	C-314011211	C-314011211	4
5	Mounting Screw	C-314001215	C-314001215	4
6	Retaining ring	V356-30244	V356-30244	1
7	Shaft seal (S1-0.7 bar)	V620-82012	V620-82012	1
	Shaft seal (S4-S5-7 bar)	V620-82068	V620-82068	
8	Shaft and bearing ass'y (Code-1)	C-S14-72403	C-S14-72403	1
	Shaft and bearing ass'y (Code-3)	C-S14-72404	C-S14-72404	
8a	Shaft (Keyed) (Code-1)	C-EX-00446	C-EX-00446	1
	Shaft (Splined) (Code-3)	C-EX-00447	C-EX-00447	
8b	Round section ring	V034-70777	V034-70777	2
8c	Ball bearing	V230-82054	V230-82054	1
8d	Key (Code-1)	V034-48690	V034-48690	1
9	Cartridge assembly *03 C.W. (P1)	VS24-10731	VS24-58882	1
	Cartridge assembly *03 C.C.W. (P1)	VS24-10732	VS24-58883	
	Cartridge assembly *05 C.W. (P1)	VS24-10733	VS24-58884	
	Cartridge assembly *05 C.C.W. (P1)	VS24-10734	VS24-58885	
	Cartridge assembly *06 C.W. (P1)	VS24-10735	VS24-58886	
	Cartridge assembly *06 C.C.W. (P1)	VS24-10736	VS24-58887	
	Cartridge assembly *08 C.W. (P1)	VS24-10737	VS24-58888	
	Cartridge assembly *08 C.C.W. (P1)	VS24-10738	VS24-58889	
	Cartridge assembly *10 C.W. (P1)	VS24-10739	VS24-58890	
	Cartridge assembly *10 C.C.W. (P1)	VS24-10740	VS24-58891	
	Cartridge assembly *12 C.W. (P1)	VS24-26509	VS24-58892	
	Cartridge assembly *12 C.C.W. (P1)	VS24-26510	VS24-58893	
	Cartridge assembly *14 C.W. (P1)	VS24-10741	VS24-58894	
	Cartridge assembly *14 C.C.W. (P1)	VS24-10742	VS24-58514	
	Cartridge assembly *15 C.W. (P1)	C-S14-72073	C-S14-72075	
	Cartridge assembly *15 C.C.W. (P1)	C-S14-72074	C-S14-72076	
	Cartridge assembly *17 C.W.(P1)	VS24-10743	VS24-51569	
	Cartridge assembly *17 C.C.W. (P1)	VS24-10744	VS24-51566	
	Cartridge assembly *20 C.W. (P1)	VS24-26853	VS24-58898	
	Cartridge assembly *20 C.C.W. (P1)	VS24-26854	VS24-58899	
	Cartridge assembly *22 C.W. (P1)	VS24-10745	VS24-58900	
Cartridge assembly *22 C.C.W. (P1)	VS24-10746	VS24-58901		
Cartridge assembly *25 C.W. (P1)	VS24-10747	VS24-58902		
Cartridge assembly *25 C.C.W. (P1)	VS24-10748	VS24-58903		
Cartridge assembly *28 C.W. (P1)	VS24-25510	VS24-58904		
Cartridge assembly *28 C.C.W. (P1)	VS14-97738	VS24-58905		
Cartridge assembly *31 C.W. (P1)	VS24-45787	VS24-58906		
Cartridge assembly *31 C.C.W. (P1)	VS24-45788	VS24-58907		
9a	Port plate - rear C.W. (P1)	V034-59777		1
	Port plate - rear C.C.W.(P1)	V034-59776		
	Port plate - rear Bi-dir (P1)		H-034-59118	
9b	Pin vane holdout	V034-59098	V034-59098	10
9c	Vane	V034-59099	V034-59099	10
9d	Cam ring - 003	V034-59050	V034-59050	1
	Cam ring - 005	V034-59051	V034-59051	

Item pos.	Description	Part No.		Qty
		VT6CB (Standard)	VT6CB (Bi-dir plates)	
9d	Cam ring - 006	V034-59052	V034-59052	1
	Cam ring - 008	V034-59053	V034-59053	
	Cam ring - 010	V034-59054	V034-59054	
	Cam ring - 012	V034-66595	V034-66595	
	Cam ring - 014	V034-59206	V034-59206	
	Cam ring - 015	C-034-66893	C-034-66893	
	Cam ring - 017	V034-59207	V034-59207	
	Cam ring - 020	V034-66607	V034-66607	
	Cam ring - 022	V034-59208	V034-59208	
	Cam ring - 025	V034-59209	V034-59209	
	Cam ring - 028	V034-59245	V034-59245	
	Cam ring - 031	V034-66843	V034-66843	
9e	Dowel pin	V324-21208	V324-21208	2
9f	Back-up ring	V618-15016	V618-15016	1
9g	Port plate - pressure C.W. (P1)	V034-59772		1
	Port plate - pressure C.C.W. (P1)	V034-59773		
	Port plate - pressure Bi-dir. (P1)		H-034-66453	
9h	Sq. section seal	V691-10229	V691-10229	1
9j	Sq. section seal	V691-10238	V691-10238	1
9k	Rotor-insert ass'y	VS24-10350	VS24-10350	1
9m	Screw	V317-06266	V317-06266	2
9n	Dowel pin	V323-82010	V323-82010	1
9r	O' ring	V671-00244	V671-00244	1
10	Cartridge assembly B02 CW		C-S14-72405	1
	Cartridge assembly B02 CCW		C-S14-72406	
	Cartridge assembly B03 CW		C-S14-72407	
	Cartridge assembly B03 CCW		C-S14-72408	
	Cartridge assembly B04 CW		C-S14-72409	
	Cartridge assembly B04 CCW		C-S14-72410	
	Cartridge assembly B05 CW		C-S14-72688	
	Cartridge assembly B05 CCW		C-S14-72689	
	Cartridge assembly B06 CW		C-S14-72411	
	Cartridge assembly B06 CCW		C-S14-72412	
	Cartridge assembly B07 CW		C-S14-72690	
	Cartridge assembly B07 CCW		C-S14-72691	
	Cartridge assembly B08 CW		C-S14-72413	
	Cartridge assembly B08 CCW		C-S14-72414	
	Cartridge assembly B09 CW		C-S14-72415	
	Cartridge assembly B09 CCW		C-S14-72416	
	Cartridge assembly B10 CW		C-S14-72692	
	Cartridge assembly B10 CCW		C-S14-72693	
	Cartridge assembly B11 CW		C-S14-72694	
	Cartridge assembly B11 CCW		C-S14-72695	
Cartridge assembly B12 CW		C-S14-72417		
Cartridge assembly B12 CCW		C-S14-72418		
Cartridge assembly B14 CW		C-S14-72696		
Cartridge assembly B14 CCW		C-S14-72697		
	Port plate - rear Bi-dir (P2)		C-034-03493	1
	Pin vane holdout		H-034-66920	12
	Vane		C-034-03457	12
	Cam ring - 002		C-034-03486	1
	Cam ring - 003		C-034-03487	
	Cam ring - 004		C-034-03488	
	Cam ring - 005		C-034-03497	
	Cam ring - 006		C-034-03489	
	Cam ring - 007		C-034-03498	
	Cam ring - 008		C-034-03490	
	Cam ring - 009		C-034-03491	
	Cam ring - 010		C-034-03500	

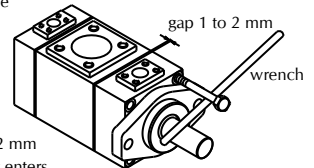
Item pos.	Description	Part No.		Qty
		VT6CB (Standard)	VT6CB (Bi-dir plates)	
10d	Cam ring - 011		C-034-03501	
	Cam ring - 012		C-034-03492	
	Cam ring - 014		C-034-03426	
10e	Dowel pin		V324-21210	2
10f	Back-up ring		C-618-00005	1
10g	Port plate - pressure Bi-dir (P2)		C-034-03455	1
10h	Sq. section seal		V691-10223	1
10j	Sq. section seal		V691-10235	1
10k	Rotor-insert ass'y		C-S14-72387	1
10m	Screw		V317-06246	2
10n	Dowel pin		V323-82020	1
10q	Bearing bush		C-EX-00448	1
10s	O' ring		V691-00045	1
9f,9j	Seal kit (S1 - 0.7 bar)	C-S14-01080	C-S14-01080	1
9h,9k	Seal kit (S4 - 7 bar)	C-S14-01080-4	C-S14-01080-4	
7,10i	Seal kit (S5 - 7 bar)	C-S14-01080-5	C-S14-01080-5	
10j,10s				
9a,9r	Port plate - rear ass'y C.W. (P1)	VS24-10805		1
	Port plate - rear ass'y C.C.W. (P1)	VS24-10806		
	Port plate - rear ass'y Bi-dir (P1)		VS24-10418	
10a,10q	Port plate - rear and bush ass'y Bi-dir (P2)		C-S14-72422	1

To change porting position, follow the steps below:

1. Secure pump and remove 4 bolts from mounting flange. Move the mounting flange 1 to 2 mm away from housing.

Insert one bolt halfway to mounting flange. Install a wrench between the shaft and bolt and turn in the desired way, so that the required position of P1 port with respect to Suction is obtained. Reinstall the bolts and tighten to corresponding mounting torque as provided on page 2.

2. Follow similar procedure for changing P2 position. Use wrench between two bolts placed diagonally opposite.



Instruction: Do not remove mounting flange/end cap completely from the housing but only just 1 to 2 mm to avoid the cartridge pin to move out from the housing dowel pin hole. Make sure no piece of paint 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.

MODEL CODE

Series **VT6CB - 022 - 008** - **P1** - **P2**

Cam ring	Displacement in ³ /rev (cm ³ /rev)	Cam ring	Displacement in ³ /rev (cm ³ /rev)
•003/B03	= (0.66) 10.8	015/B15	= (3.08) 50.5
005/B05	= (1.05) 17.2	017/B17	= (3.56) 58.3
006/B06	= (1.30) 21.3	020/B20	= (3.89) 63.8
008/B08	= (1.61) 26.4	022/B22	= (4.29) 70.3
010/B10	= (2.08) 34.1	025/B25	= (4.84) 79.3
012/B12	= (2.26) 37.1	028/B28	= (5.42) 88.8
014/B14	= (2.81) 46.0	031/B31	= (6.10) 100.0

•'0' - Uni-directional 'B' - Bi-directional

Cam ring	Displacement in ³ /rev (cm ³ /rev)	Cam ring	Displacement in ³ /rev (cm ³ /rev)
B02	= 0.35 (5.8)	B08	= 1.52 (24.9)
B03	= 0.60 (9.8)	B09	= 1.71 (28.0)
B04	= 0.78 (12.8)	B10	= 1.94 (31.8)
B05	= 0.97 (15.9)	B11	= 2.13 (34.9)
B06	= 1.21 (19.8)	B12	= 2.50 (41.0)
B07	= 1.37 (22.5)	B14	= 2.75 (45.0)

Type of shaft
1 - keyed (no SAE)
3 - splined

Direction of rotation
(view on shaft end)
R - clockwise
L - counter-clockwise

00 - C - 1 - 02 *

Modifications

Mounting W/connection variables
S = 2 1/2" SAE 4-Bolt Pad.

CODE	P1	P2
01	1" SAE 4 bolt Pad.	3/4" SAE 4 bolt Pad.
M1	1" SAE 4 bolt Pad.	3/4" SAE 4 bolt Pad.
02	SAE 16,1 5/16" O'ring Boss	SAE 12,1 1/16" 12 UNF-2B O'ring Boss

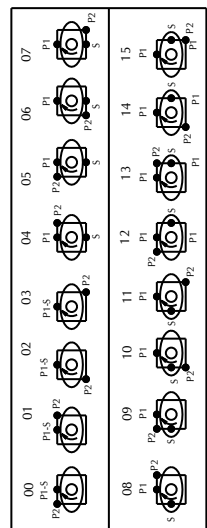
Seal class

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

Design letter

Porting combination

00 - standard



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