



VELJAN

Service Information

SS4 - 00104

VT6CC - VT6CCM

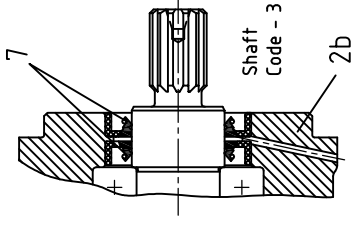
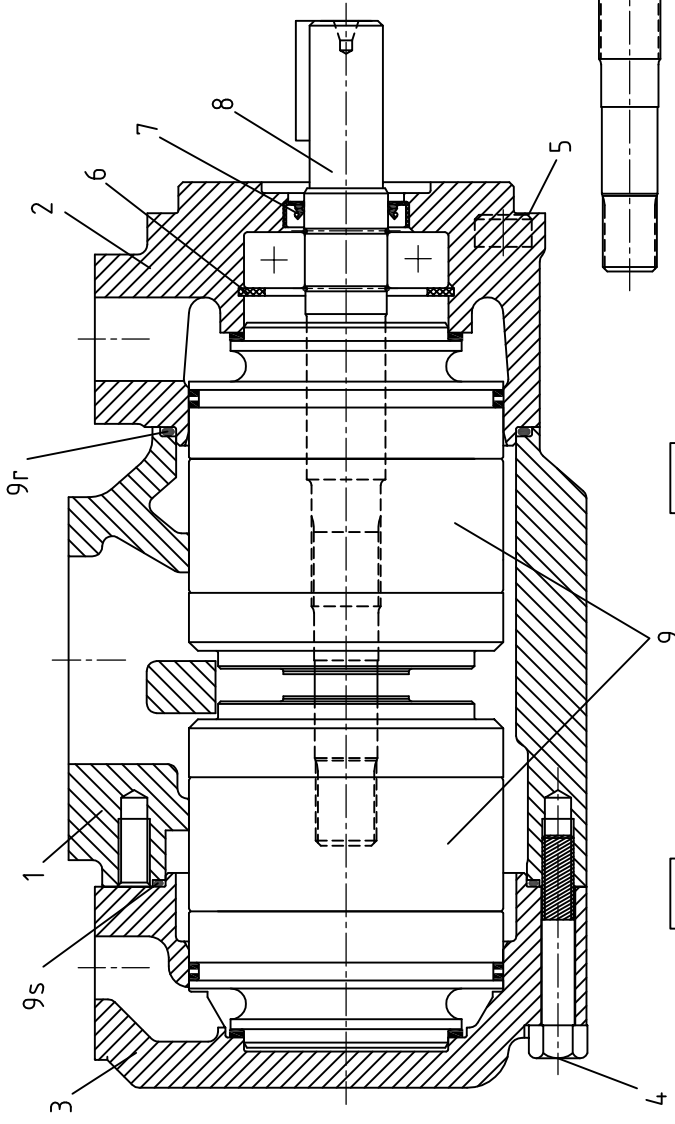
VT6CCP - VT6CCZ

Double vane pump



PHOTO

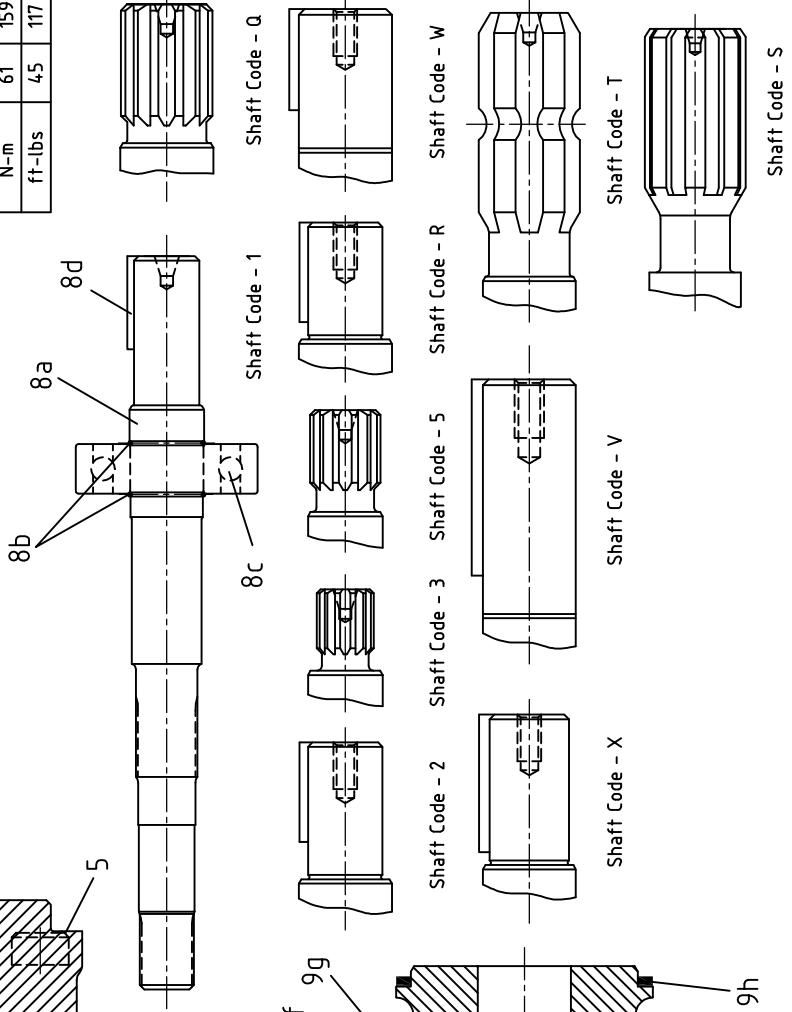
Bold printed are recommended repair kits and assemblies



VT6CCP

Mounting torque

Item pos.	4	5
N-m	61	159
ft-lbs	45	117

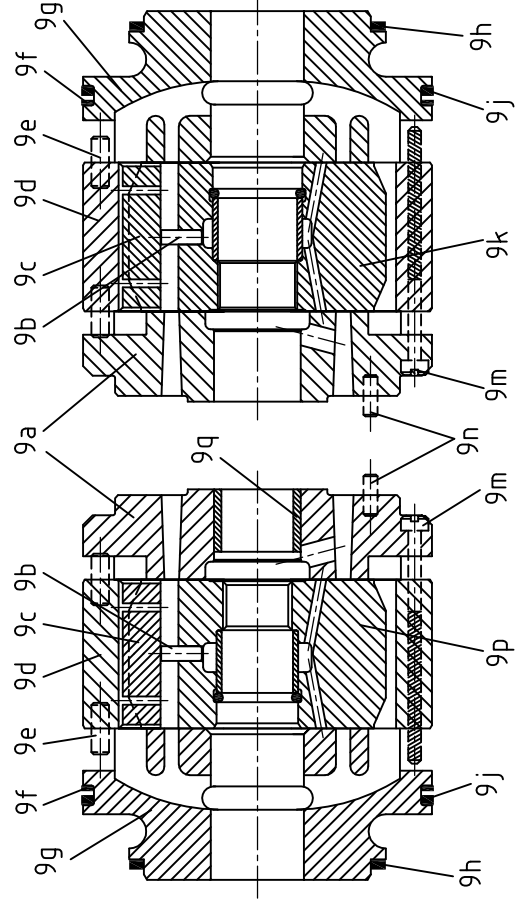


P2

ITEM 9s INCLUDED

P1

ITEM 9r INCLUDED



Item pos.	Description	Part No.				Qty
		VT6CC (Standard)	VT6CC (Bi-dir plates)	VT6CCM-B** VT6CCP-B**	VT6CCZ	
1	Housing (UNC) (S = 2½")	V034-59125	V034-59125	V034-59125	V034-59125	1
	Housing (Metric) (S = 2½")	H-034-66509	H-034-66509	H-034-66509	H-034-66509	
	Housing (UNC) (S = 3")	V034-59105	V034-59105	V034-59105	V034-59105	
	Housing (Metric) (S = 3")	H-034-66675	H-034-66675	H-034-66675	H-034-66675	
2	Mounting flange (UNC) (for Shafts 1-3-5)	V034-59107	V034-59107	V034-59107		1
	Mounting flange (Metric) (for Shafts 1-3-5)	H-034-66690	H-034-66690	H-034-66690		
	Mounting flange (UNC) (for Shafts 2-R-X-W-V-T-Q-S)	H-034-66579	H-034-66579	H-034-66579	H-034-66566	
	Mounting flange (Metric) (for Shafts 2-R-X-W-V-T-Q-S)	H-034-66507	H-034-66507	H-034-66507	H-034-66823	
	Mounting flange (UNC) (for VT6CCP)			H-034-66729		
	Mounting flange (Metric) (for VT6CCP)			C-034-03064		
3	End cap (UNC) (P2 = ¾")	V034-59425	V034-59425	V034-59425	V034-59425	1
	End cap (Metric) (P2 = ¾")	H-034-66508	H-034-66508	H-034-66508	H-034-66508	
	End cap (UNC) (P2 = 1")	V034-59423	V034-59423	V034-59423	V034-59423	
	End cap (Metric) (P2 = 1")	H-034-66674	H-034-66674	H-034-66674	H-034-66674	
4	Mounting Screw	V306-40094	V306-40094	V306-40094	V306-40094	7
5	Mounting Screw	V358-20320	V358-20320	V358-20320	V358-20320	4
6	Retaining ring	V356-30244	V356-30244	V356-30244	V356-30244	1
7	Shaft seal (S1-0.7 bar) (for Shafts 1-3-5)	V620-82012	V620-82012	V620-82012		1
	Shaft seal (S4-S5-7 bar) (for Shafts 1-3-5)	V620-82068	V620-82068	V620-82068		
	Shaft seal (S1-0.7 bar) (for Shafts 2-R-X-W-V-T-Q-S)	V620-82046	V620-82046	V620-82046	V620-82046	
	Shaft seal (S4-7 bar) (for Shafts 2-R-X-W-V-T-Q-S)	V620-82046-4	V620-82046-4	V620-82046-4	V620-82046-4	
	Shaft seal (S5-7 bar) (for Shafts 2-R-X-W-V-T-Q-S)	V620-82046-5	V620-82046-5	V620-82046-5	V620-82046-5	
	Shaft seal (S1-0.7 bar) (VT6CCP)			V620-82046		
8	Shaft and bearing ass'y (Code-1)	VS24-10346	VS24-10346	VS24-10346		1
	Shaft and bearing ass'y (Code-2) (VT6CCW)(VT6CCMW)	VS24-26208	VS24-26208	VS24-26208		
	Shaft and bearing ass'y (Code-3)	VS24-10348	VS24-10348	VS24-10348		
	Shaft and bearing ass'y (Code-5)	VS24-10347	VS24-10347	VS24-10347		
	Shaft and bearing ass'y (Code-R) (VT6CCMW)			VS24-30001		
	Shaft and bearing ass'y (Code-X) (VT6CCMW)			VS24-26211	VS24-51603	
	Shaft and bearing ass'y (Code-W) (VT6CCMW)			VS24-26376	VS24-51605	
	Shaft and bearing ass'y (Code-V) (VT6CCMW)			VS14-97723	VS24-51604	
	Shaft and bearing ass'y (Code-T) (VT6CCMW)			VS24-40034		
	Shaft and bearing ass'y (Code-Q) (VT6CCMW)			C-S14-71566		
	Shaft and bearing ass'y (Code-3) (VT6CCP)			VS24-40231		
	Shaft and bearing ass'y (Code-4) (VT6CCP)			VS24-58341		
	Shaft and bearing ass'y (Code-6) (VT6CCP)			VS24-40232		
	Shaft and bearing ass'y (Code-S)		S24-64498	C-S14-72359	C-S14-72358	
	8a	Shaft (Keyed) (Code-1)	V034-59110	V034-59110	V034-59110	
Shaft (Keyed) (Code-2) (VT6CCW) (VT6CCMW)		H-034-66576	H-034-66576	H-034-66576		
Shaft (Splined) (Code-3)		V034-59108	V034-59108	V034-59108		
Shaft (Splined) (Code-5)		V034-59109	V034-59109	V034-59109		
Shaft (Keyed) (Code-R) (VT6CCMW)				H-034-66712		
Shaft (Keyed) (Code-X) (VT6CCMW)				H-034-66575	H-034-66983	
Shaft (Keyed) (Code-W) (VT6CCMW)				H-034-66590	H-034-66985	
Shaft (Keyed) (Code-V) (VT6CCMW)				H-034-66506	H-034-66984	
Shaft (Keyed) (Code-T) (VT6CCMW)				H-034-66726		
Shaft (Splined) (Code-Q) (VT6CCMW)				C-034-03042		
Shaft (splined) (Code-3) (VT6CCP)				H-034-66727		
Shaft (splined) (Code-4) (VT6CCP)				H-034-67001		
Shaft (splined) (Code-6) (VT6CCP)				H-034-66728		
Shaft (splined) (Code-S)			C-034-03200	C-034-03282	C-034-03203	
8b		Round section ring (1-3-5)	V034-70777	V034-70777	V034-70777	
	Round section ring (2-R-X-W-V-T-Q-S)	V034-70777	V034-70777	V034-70777	V034-70777	
8c	Ball bearing	V230-82054	V230-82054	V230-82054	V230-90019-3	1
8d	Key (Code -1)	V034-49622	V034-49622	V034-49622		1
	Key (Code -2)	V034-48690	V034-48690	V034-48690		
	Key (Code -R)			H-034-66717		
	Key (Code -X)			V034-19579	V034-19579	
	Key (Code -W)			V034-49676	V034-49676	
	Key (Code -V)			H-034-30168	H-034-30168	

Item pos.	Description	Part No.				Qty		
		VT6CC (Standard)	VT6CC (Bi-dir plates)	VT6CCM-B** VT6CCP-B**	VT6CCZ			
9	Cartridge assembly *03 C.W. (P1)	VS24-10731	VS24-10353	VS24-40150	VS24-58882	1		
	Cartridge assembly *03 C.C.W. (P1)	VS24-10732	VS24-10354	VS24-40151	VS24-58883			
	Cartridge assembly *05 C.W. (P1)	VS24-10733	VS24-10355	VS24-40152	VS24-58884			
	Cartridge assembly *05 C.C.W. (P1)	VS24-10734	VS24-10356	VS24-40153	VS24-58885			
	Cartridge assembly *06 C.W. (P1)	VS24-10735	VS24-10357	VS24-40154	VS24-58886			
	Cartridge assembly *06 C.C.W. (P1)	VS24-10736	VS24-10358	VS24-40155	VS24-58887			
	Cartridge assembly *08 C.W. (P1)	VS24-10737	VS24-10359	VS24-40156	VS24-58888			
	Cartridge assembly *08 C.C.W. (P1)	VS24-10738	VS24-10360	VS24-40157	VS24-58889			
	Cartridge assembly *10 C.W. (P1)	VS24-10739	VS24-10361	VS24-40158	VS24-58890			
	Cartridge assembly *10 C.C.W. (P1)	VS24-10740	VS24-10362	VS24-40159	VS24-58891			
	Cartridge assembly *12 C.W. (P1)	VS24-26509	VS24-26496	VS24-40160	VS24-58892			
	Cartridge assembly *12 C.C.W. (P1)	VS24-26510	VS24-26497	VS24-40161	VS24-58893			
	Cartridge assembly *14 C.W. (P1)	VS24-10741	VS24-10363	VS24-40162	VS24-58894			
	Cartridge assembly *14 C.C.W. (P1)	VS24-10742	VS24-10364	VS24-40163	VS24-58514			
	Cartridge assembly *15 C.W. (P1)	C-S14-72073	C-S14-72075	C-S14-72141	C-S14-72141			
	Cartridge assembly *15 C.C.W. (P1)	C-S14-72074	C-S14-72076	C-S14-72142	C-S14-72142			
	Cartridge assembly *17 C.W.(P1)	VS24-10743	VS24-10365	VS24-40164	VS24-51569			
	Cartridge assembly *17 C.C.W. (P1)	VS24-10744	VS24-10366	VS24-40165	VS24-51566			
	Cartridge assembly *20 C.W. (P1)	VS24-26853	VS24-33818	VS24-40166	VS24-58898			
	Cartridge assembly *20 C.C.W. (P1)	VS24-26854	VS24-33819	VS24-40167	VS24-58899			
	Cartridge assembly *22 C.W. (P1)	VS24-10745	VS24-10367	VS24-40168	VS24-58900			
	Cartridge assembly *22 C.C.W. (P1)	VS24-10746	VS24-10368	VS24-40169	VS24-58901			
	Cartridge assembly *25 C.W. (P1)	VS24-10747	VS24-10369	VS24-40170	VS24-58902			
	Cartridge assembly *25 C.C.W. (P1)	VS24-10748	VS24-10370	VS24-40171	VS24-58903			
	Cartridge assembly *28 C.W. (P1)	VS24-25510	VS24-26435	VS24-40172	VS24-58904			
	Cartridge assembly *28 C.C.W. (P1)	VS14-97738	VS24-26436	VS24-40173	VS24-58905			
	Cartridge assembly *31 C.W. (P1)	VS24-45787	VS24-49891	VS24-45793	VS24-58906			
	Cartridge assembly *31 C.C.W. (P1)	VS24-45788	VS24-49892	VS24-45794	VS24-58907			
		Cartridge assembly *03 C.W. (P2)	VS24-10749	VS24-10371	VS24-40200		VS24-51606	1
		Cartridge assembly *03 C.C.W. (P2)	VS24-10750	VS24-10372	VS24-40201		VS24-51607	
Cartridge assembly *05 C.W. (P2)		VS24-10751	VS24-10373	VS24-40202	VS24-51608			
Cartridge assembly *05 C.C.W. (P2)		VS24-10752	VS24-10374	VS24-40203	VS24-51609			
Cartridge assembly *06 C.W. (P2)		VS24-10753	VS24-10375	VS24-40204	VS24-51610			
Cartridge assembly *06 C.C.W. (P2)		VS24-10754	VS24-10376	VS24-40205	VS24-58936			
Cartridge assembly *08 C.W. (P2)		VS24-10755	VS24-10377	VS24-40206	VS24-51612			
Cartridge assembly *08 C.C.W. (P2)		VS24-10756	VS24-10378	VS24-40207	VS24-58515			
Cartridge assembly *10 C.W. (P2)		VS24-10757	VS24-10379	VS24-40208	VS24-51570			
Cartridge assembly *10 C.C.W. (P2)		VS24-10758	VS24-10380	VS24-40209	VS24-51567			
Cartridge assembly *12 C.W. (P2)		VS24-26482	VS24-26498	VS24-40210	VS24-51616			
Cartridge assembly *12 C.C.W. (P2)		VS24-26483	VS24-26499	VS24-40211	VS24-51617			
Cartridge assembly *14 C.W. (P2)		VS24-10759	VS24-10381	VS24-40212	VS24-58937			
Cartridge assembly *14 C.C.W. (P2)		VS24-10760	VS24-10382	VS24-40213	VS24-58938			
Cartridge assembly *15 C.W. (P2)		C-S14-72137	C-S14-72139	C-S14-72143	C-S14-72143			
Cartridge assembly *15 C.C.W. (P2)		C-S14-72138	C-S14-72140	C-S14-72144	C-S14-72143			
Cartridge assembly *17 C.W. (P2)		VS24-10761	VS24-10383	VS24-40214	VS24-51620			
Cartridge assembly *17 C.C.W. (P2)		VS24-10762	VS24-10384	VS24-40215	VS24-51621			
Cartridge assembly *20 C.W. (P2)		VS24-31023	VS24-40684	VS24-40216	VS24-51622			
Cartridge assembly *20 C.C.W. (P2)		VS24-40032	VS24-40685	VS24-40217	VS24-51623			
Cartridge assembly *22 C.W. (P2)		VS24-10763	VS24-10385	VS24-40218	VS24-51624			
Cartridge assembly *22 C.C.W. (P2)		VS24-10764	VS24-10386	VS24-40219	VS24-51625			
Cartridge assembly *25 C.W. (P2)		VS24-10765	VS24-10387	VS24-40220	VS24-58939			
Cartridge assembly *25 C.C.W. (P2)		VS24-10766	VS24-10388	VS24-40221	VS24-58940			
Cartridge assembly *28 C.W. (P2)		VS24-25547	VS24-25973	VS24-40222	VS24-51628			
Cartridge assembly *28 C.C.W. (P2)		VS24-25546	VS24-25974	VS24-40223	VS24-51629			
Cartridge assembly *31 C.W. (P2)		VS24-45771	VS24-51341	VS24-45775	VS24-51630			
Cartridge assembly *31 C.C.W. (P2)		VS24-45772	VS24-51342	VS24-45776	VS24-51631			
9a		Port plate - rear C.W. (P1)	V034-59776				1	
		Port plate - rear C.C.W.(P1)	V034-59777					
	Port plate - rear C.W. (P2)	V034-59777						
	Port plate - rear C.C.W.(P2)	V034-59776						

Item pos.	Description	Part No.				Qty
		VT6CC (Standard)	VT6CC (Bi-dir plates)	VT6CCM-B** VT6CCP-B**	VT6CCZ	
	Port plate - rear Bi-dir (P1)		V034-59118	V034-59118	V034-59118	
	Port plate - rear Bi-dir (P2)		V034-59118	V034-59118	H-034-66837	
9b	Pin vane holdout	V034-59098	V034-59098	V034-24982	V034-59098	20
9c	Vane	V034-59099	V034-59099	V034-66716	V034-66716	20
9d	Cam ring - 003	V034-59050	V034-59050	V034-59050	V034-59050	2
	Cam ring - 005	V034-59051	V034-59051	V034-59051	V034-59051	
	Cam ring - 006	V034-59052	V034-59052	V034-59052	V034-59052	
	Cam ring - 008	V034-59053	V034-59053	V034-59053	V034-59053	
	Cam ring - 010	V034-59054	V034-59054	V034-59054	V034-59054	
	Cam ring - 012	V034-66595	V034-66595	V034-66595	V034-66595	
	Cam ring - 014	V034-59206	V034-59206	V034-59206	V034-59206	
	Cam ring - 015	C-034-66893	C-034-66893	C-034-66893	C-034-66893	
	Cam ring - 017	V034-59207	V034-59207	V034-59207	V034-59207	
	Cam ring - 020	V034-66607	V034-66607	V034-66607	V034-66607	
	Cam ring - 022	V034-59208	V034-59208	V034-59208	V034-59208	
	Cam ring - 025	V034-59209	V034-59209	V034-59209	V034-59209	
	Cam ring - 028	V034-59245	V034-59245	V034-59245	V034-59245	
	Cam ring - 031	V034-66843	V034-66843	V034-66843	V034-66843	
9e	Dowel pin	V324-21208	V324-21208	V324-21208	V324-21208	4
9f	Back-up ring	V618-15016	V618-15016	V618-15016	V618-15016	2
9g	Port plate - pressure C.W. (P1)	V034-59772	V034-59772	V034-59772		1
	Port plate - pressure C.C.W. (P1)	V034-59773	V034-59773	V034-59773		
	Port plate - pressure C.W. (P2)	V034-59773	V034-59773	V034-59773		
	Port plate - pressure C.C.W. (P2)	V034-59772	V034-59772	V034-59772		
	Port plate - pressure Bi-dir		H-034-66453	H-034-66453	H-034-66453	
9h	Sq. section seal	V691-10229	V691-10229	V691-10229	V691-10229	2
9j	Sq. section seal	V691-10238	V691-10238	V691-10238	V691-10238	2
9k	Rotor-insert ass'y	VS24-10350	VS24-10350	VS24-33974	VS24-10350	1
9m	Screw	V317-06266	V317-06266	V317-06266	V317-06266	4
9n	Dowel pin	V323-82010	V323-82010	V323-82010	V323-82010	2
9p	Rotor-insert ass'y	VS24-10116	VS24-10116	VS24-30049	VS24-10116	1
9q	Bearing bush	V034-59412	V034-59412	V034-59412		1
	Bearing needle				V230-82079	1
9r	O' ring	V671-00244	V671-00244	V671-00244	V671-00244	1
9s	Sq. section seal	V671-10156	V671-10156	V671-10156	V671-10156	1
9s,9r 9j,9h 9f,7	Seal kit (S1 - 0.7 bar) (for Shafts 1-3-5)	VS24-10352	VS24-10352	VS24-10352		1
	Seal kit (S4 - 7 bar) (for Shafts 1-3-5)	VS24-10352-4	VS24-10352-4	VS24-10352-4		
	Seal kit (S5 - 7 bar) (for Shafts 1-3-5)	VS24-10352-5	VS24-10352-5	VS24-10352-5		
	Seal kit (S1 - 0.7 bar) (for Shafts 2-R-X-W-V-T-Q-S)	VS14-97724	VS14-97724	VS14-97724	VS14-97724	
	Seal kit (S4 - 7 bar) (for Shafts 2-R-X-W-V-T-Q-S)	VS14-97724-4	VS14-97724-4	VS14-97724-4		
	Seal kit (S5 - 7 bar) (for Shafts 2-R-X-W-V-T-Q-S)	VS14-97724-5	VS14-97724-5	VS14-97724-5		
	Seal kit (S1 - 0.7 bar) (for VT6CCP)			VS24-40230		
9a,9n	Port plate - rear ass'y C.W. (P1)	VS24-10805				1
	Port plate - rear ass'y C.C.W. (P1)	VS24-10806				
9a,9q 9n	Port plate - rear ass'y Bi-dir (P1)		VS24-10418	VS24-10418	VS24-10418	1
	Port plate - rear and bush ass'y C.W. (P2)	VS24-10807				
	Port plate - rear and bush ass'y C.C.W. (P2)	VS24-10808				
	Port plate - rear and bush ass'y Bi-dir (P2)		VS24-10349	VS24-10349	VS24-45726	

* 0 - Standard B - Bi-directional plates/Mobile R - Mobile-Spring assisted (on request)

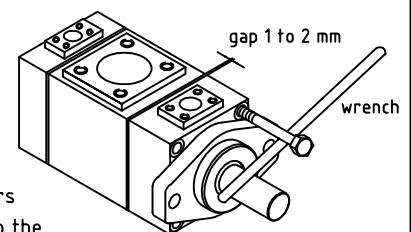
To change porting position, follow the steps below:

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

VT6CC * W - * 22 - * 10 - 1 R 00 - C 1 01 - *

Series

- * M = Mobile
- * P = Mobile with double shaft seal
- * Z = Mobile with double shaft loading capability

(* omit for Industrial)

Use for severe duty shaft only (only for VT6CC and VT6CCM)

Cam ring (P1 & P2)	Displacement in ³ /rev (cm ³ /rev)	Cam ring (P1 & P2)	Displacement in ³ /rev (cm ³ /rev)
003/B03/R03	= 0.66 (10.80)	015/B15/R15	= 3.08 (50.50)
005/B05/R05	= 1.05 (17.20)	017/B17/R17	= 3.56 (58.30)
006/B06/R06	= 1.30 (21.30)	020/B20/R20	= 3.89 (63.80)
008/B08/R08	= 1.61 (26.40)	022/B22/R22	= 4.29 (70.30)
010/B10/R10	= 2.08 (34.10)	025/B25/R25	= 4.84 (79.30)
012/B12/R12	= 2.26 (37.10)	028/B28/R28	= 5.42 (88.80)
014/B14/R14	= 2.81 (46.00)	031/B31/R31	= 6.10 (100.00)

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

Type of Shaft

VT6CC/T6CCM

- 1 = Keyed (no SAE)
- 3 = Splined (SAE-BB)
- 5 = Splined (SAE-B)

VT6CCW

- 2 = Keyed (SAE-BB)
- S = Splined (DIN 5462)

Type of Shaft

VT6CCMW

- 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

VT6CCP

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

VT6CCZ

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

Notes : To change port position see previous page

Modification

Port connection variables SAE 4 bolt flange (J518c)

CODE	UNC	METRIC	P1	P2	S
00	OM	1"	1"	1"	3"
01	W0	1"	1"	3/4"	3"
10	1M	1"	1"	1"	2 1/2"
11	W1	1"	1"	3/4"	2 1/2"

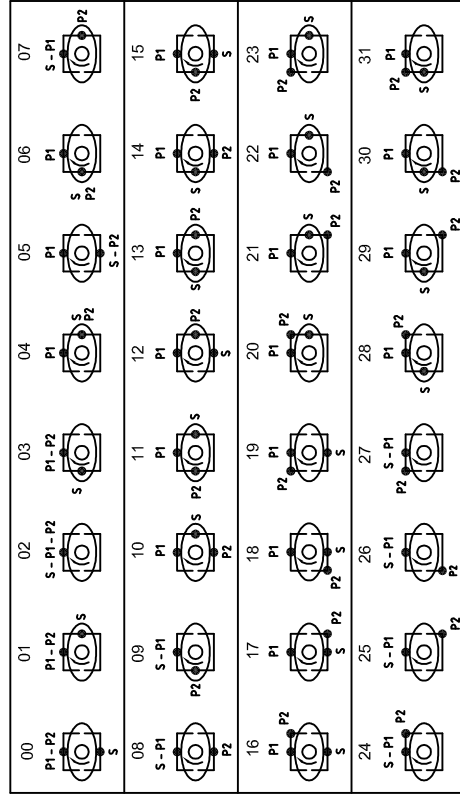
Seal class

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

Design letter

A = VT6CCZ C = Industrial D = Mobile

Porting combination : (00 = Standard)



Direction of rotation

- R = Clockwise
- L = Counter - clockwise

Print	---
Replace	---
Revision	---