



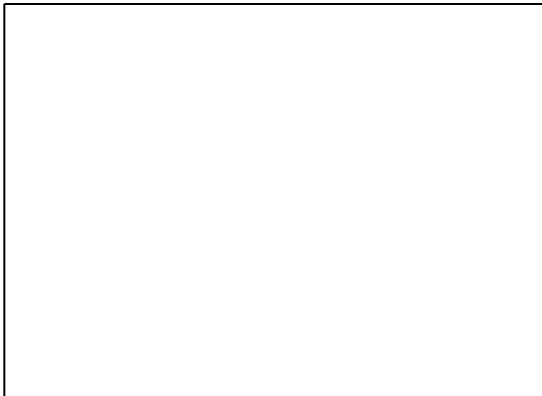
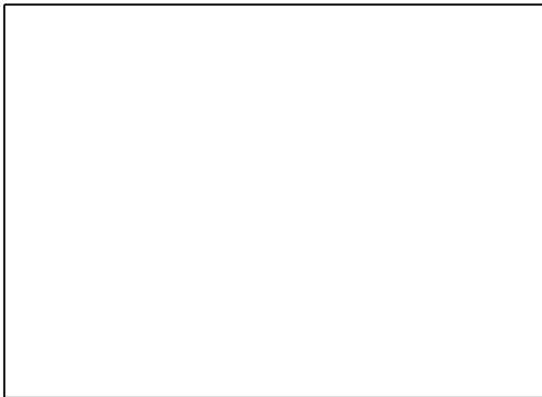
VELJAN

Service Information

SS4-00162

VT67EDC / VT67EDCS

Triple vane pump

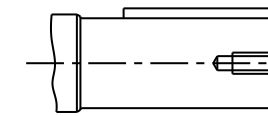
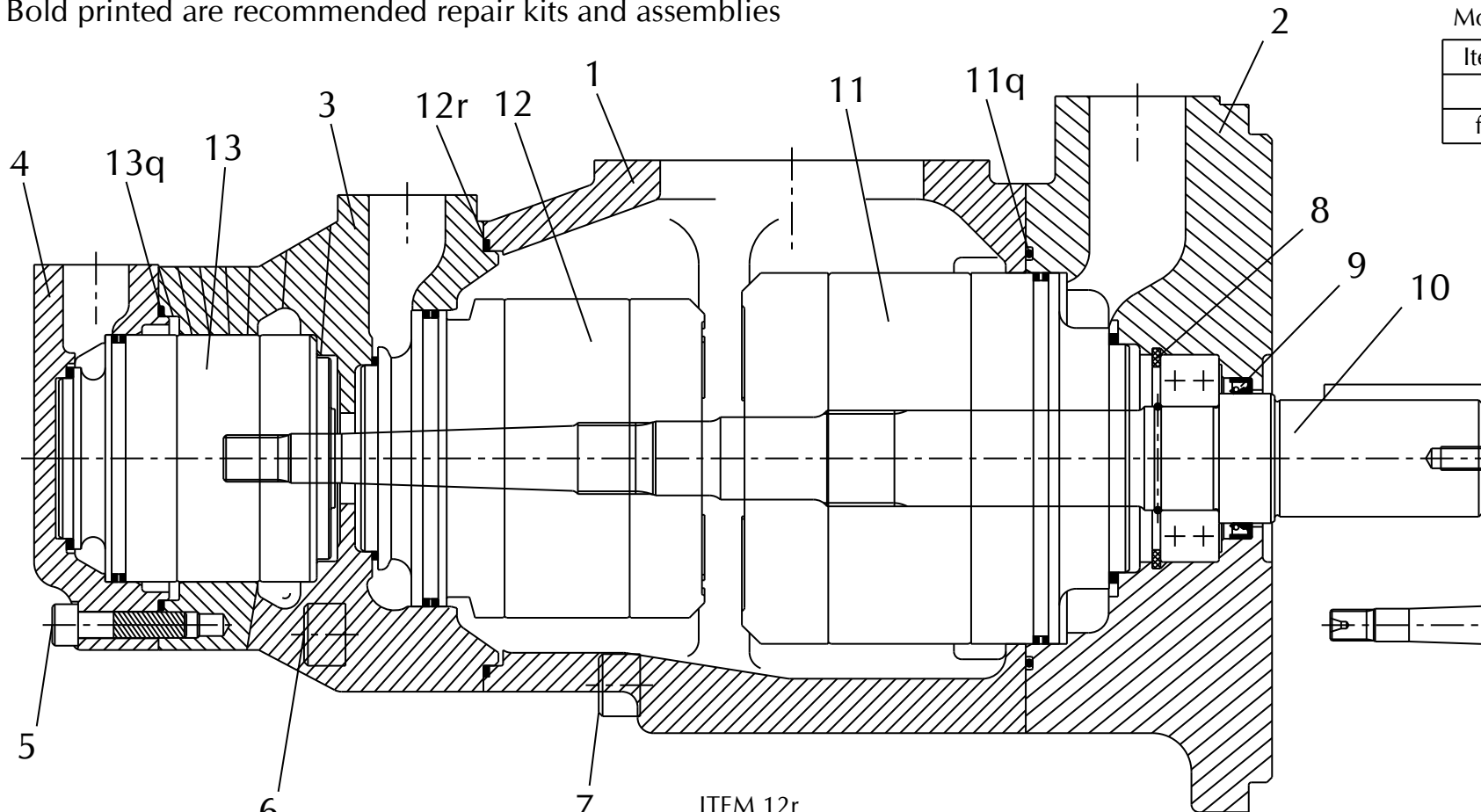


PHOTO

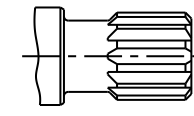
Bold printed are recommended repair kits and assemblies

Mounting torque

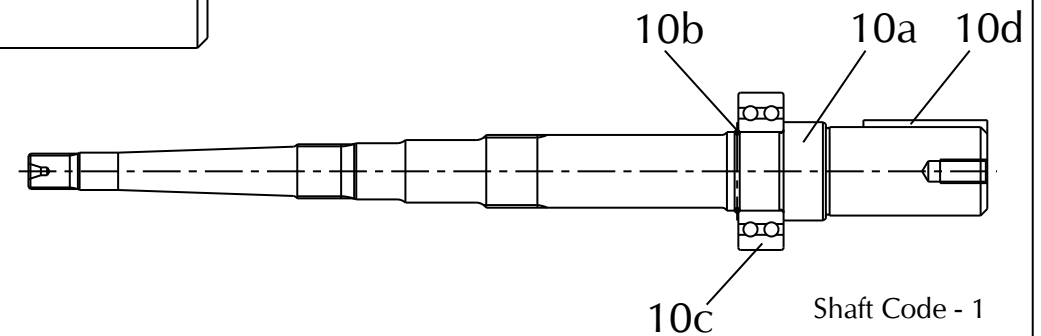
Item pos.	5	6	7
N-m	80	190	300
ft-lbs	60	140	220



Shaft Code - 2

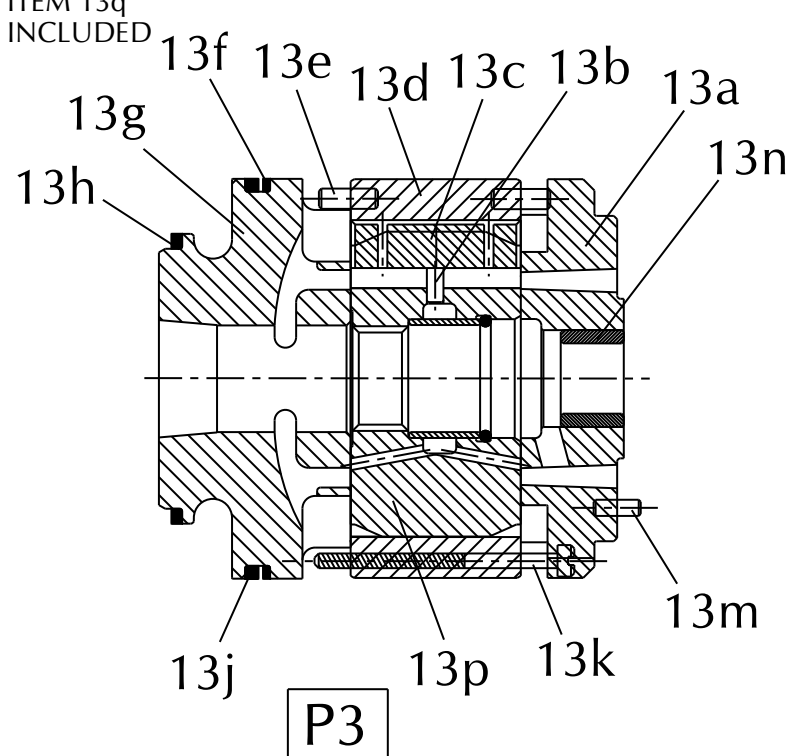


Shaft Code - 3



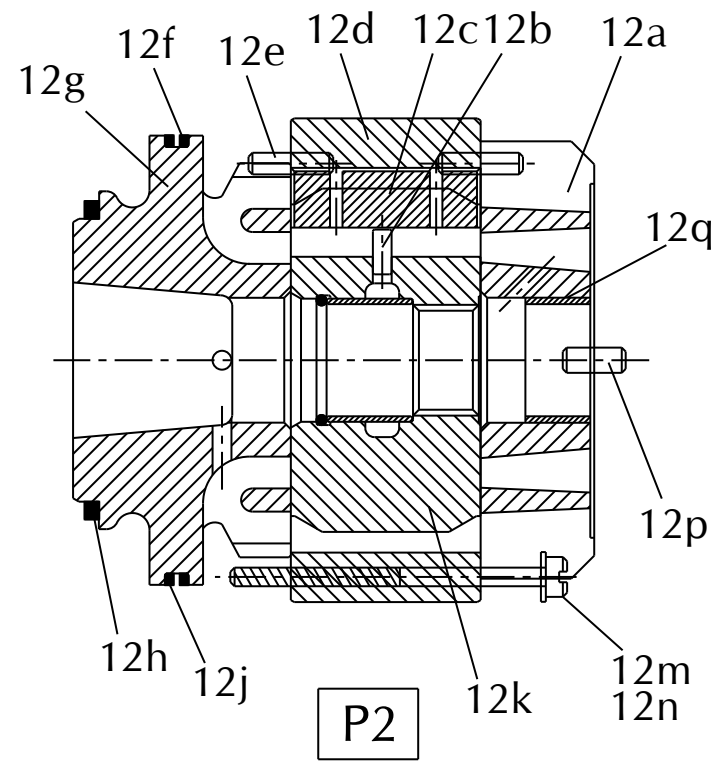
Shaft Code - 1

ITEM 13q INCLUDED



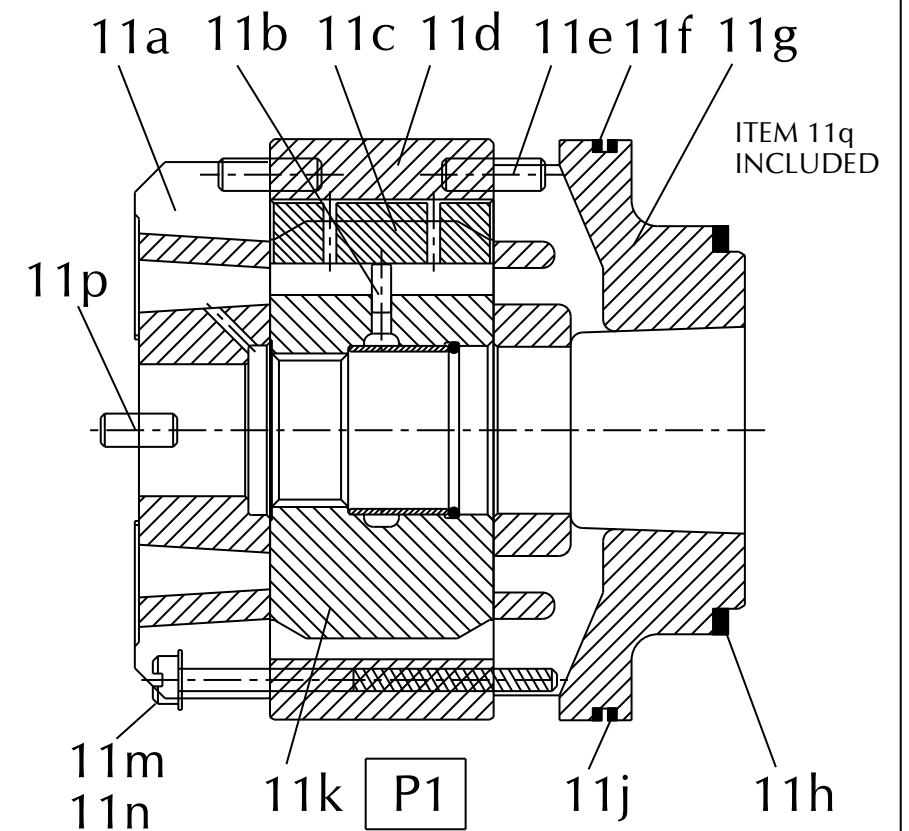
P3

ITEM 12r INCLUDED



P2

ITEM 11q INCLUDED



P1

Item pos.	Description	Part No.		Qty
		VT67EDC - VT67EDCS (Standard)	VT67EDC - VT67EDCS (Bi-dir plates) (Only for P2 & P3)	
1	Housing (Metric) -T67EDC/T67EDCS	H-034-66782	H-034-66782	1
	Housing (UNC) -T67EDCS	H-034-66810	H-034-66810	
2	Mounting flange (Metric) T67EDC/T67EDCS	H-034-66781	H-034-66781	1
	Mounting flange (Metric) -T67EDCS	H-034-67314	H-034-67314	
	Mounting flange (UNC) -T67EDCS	H-034-66809	H-034-66809	
3	Port block (Metric) T67EDC/T67EDCS	H-034-66783	H-034-66783	1
	Port block (UNC) -T67EDCS	H-034-66812	H-034-66812	
4	End cap (Metric) (P3 = 1") T67EDC/T67EDCS	H-034-71327	H-034-71327	1
	End cap (UNC) (P3 = 1") -T67EDCS	V034-48579	V034-48579	
	End cap (Metric) (P3 = 3/4") T67EDC/T67EDCS	H-034-66765	H-034-66765	
	End cap (UNC) (P3 = 3/4") -T67EDCS	V034-66523	V034-66523	
5	Mounting Screw	V361-11264-3	V361-11264-3	7
6	Mounting Screw	V361-14324-3	V361-14324-3	4
7	Mounting Screw	V361-14464-3	V361-14464-3	4
8	Retaining ring	V356-30315	V356-30315	1
9	Shaft seal (S1-0.7 bar)	V620-00018-3	V620-00018-3	1
	Shaft seal (S4-S5-7 bar)	V620-00019-3	V620-00019-3	
10	Shaft and bearing ass'y (Code-1) -T67EDC	VS24-44516	VS24-44516	1
	Shaft and bearing ass'y (Code-2) -T67EDCS	VS24-51348	VS24-51348	
	Shaft and bearing ass'y (Code-3) -T67EDCS	VS24-44517	VS24-44517	
10a	Shaft (Keyed) (Code-1) -T67EDC	H-034-66785	H-034-66785	1
	Shaft (Keyed) (Code-2) -T67EDCS	H-034-66977	H-034-66977	
	Shaft (Keyed) (Code-3) -T67EDCS	H-034-66784	H-034-66784	
10b	Round section ring	V034-70866	V034-70866	1
10c	Ball bearing	V230-90018-3	V230-90018-3	1
10d	Key (Code-1) -T67EDC	H-034-66786	H-034-66786	1
	Key (Code-1) -T67EDCS	H-034-66978	H-034-66978	
11	Cartridge assembly 042 C.W. (P1)	VS24-77675		1
	Cartridge assembly 042 C.C.W. (P1)	VS24-77676		
	Cartridge assembly 045 C.W. (P1)	VS24-77677		
	Cartridge assembly 045 C.C.W. (P1)	VS24-77678		
	Cartridge assembly 050 C.W. (P1)	VS24-77679		
	Cartridge assembly 050 C.C.W. (P1)	VS24-77680		
	Cartridge assembly 052 C.W. (P1)	VS24-77681		
	Cartridge assembly 052 C.C.W. (P1)	VS24-77682		
	Cartridge assembly 054 C.W. (P1)	VS24-77683		
	Cartridge assembly 054 C.C.W. (P1)	VS24-77684		
	Cartridge assembly 057 C.W. (P1)	VS24-77685		
	Cartridge assembly 057 C.C.W. (P1)	VS24-77686		
	Cartridge assembly 062 C.W. (P1)	VS24-77687		
	Cartridge assembly 062 C.C.W. (P1)	VS24-77688		
	Cartridge assembly 066 C.W. (P1)	VS24-77689		
	Cartridge assembly 066 C.C.W. (P1)	VS24-77690		
Cartridge assembly 072 C.W. (P1)	VS24-77691			

Item pos.	Description	Part No.		Qty
		VT67EDC (Standard)	VT67EDC (Bi-dir plates) (Only for P2 & P3)	
	Cartridge assembly 072 C.C.W. (P1)	VS24-77692		
	Cartridge assembly 085 C.W. (P1)	VS24-77693		
	Cartridge assembly 085 C.C.W. (P1)	VS24-77694		
11a	Port plate - rear C.W.	H-034-67407		1
	Port plate - rear C.C.W.	H-034-67435		
11b	Pin vane holdout	V034-59161		12
11c	Vane	V034-59162		12
11d	Cam ring - 042	V034-67503		1
	Cam ring - 045	H-034-67504		
	Cam ring - 050	H-034-67505		
	Cam ring - 052	H-034-67506		
	Cam ring - 054	H-034-67619		
	Cam ring - 057	H-034-67507		
	Cam ring - 062	H-034-67508		
	Cam ring - 066	H-034-67509		
	Cam ring - 072	H-034-67447		
	Cam ring - 085	H-034-67455		
11e	Dowel pin	V324-22016		2
11f	Back-up ring	V618-15018		1
11g	Port plate - pressure C.W.	H-034-67408		1
	Port plate - pressure C.C.W.	H-034-67434		
11h	Sq. section seal	V691-10237		1
11j	Sq. section seal	V691-10253		1
11k	Rotor-insert ass'y	VS24-10185		1
11m	Screw	V310-10340		2
11n	Lockwasher internal tooth	V348-10010		2
11p	Dowel pin	V323-82014		1
11q	Sq. section seal	V671-10259		1
12	Cartridge assembly B14 C.W. (P2)		VS24-90570	1
	Cartridge assembly B14 C.C.W. (P2)		VS24-90571	
	Cartridge assembly B17 C.W. (P2)		VS24-90572	
	Cartridge assembly B17 C.C.W. (P2)		VS24-90573	
	Cartridge assembly B20 C.W. (P2)		VS24-90574	
	Cartridge assembly B20 C.C.W. (P2)		VS24-90575	
	Cartridge assembly B22 C.W. (P2)		VS24-90576	
	Cartridge assembly B22 C.C.W. (P2)		VS24-90577	
	Cartridge assembly B24 C.W. (P2)		VS24-90578	
	Cartridge assembly B24 C.C.W. (P2)		VS24-90579	
	Cartridge assembly B28 C.W. (P2)		VS24-90580	
	Cartridge assembly B28 C.C.W. (P2)		VS24-90581	
	Cartridge assembly B31 C.W. (P2)		VS24-90582	
	Cartridge assembly B31 C.C.W. (P2)		VS24-90583	
Cartridge assembly B35 C.W. (P2)		VS24-90584		

	Cartridge assembly B35 C.C.W. (P2)		VS24-90585	
	Cartridge assembly B38 C.W. (P2)		VS24-90586	
	Cartridge assembly B38 C.C.W. (P2)		VS24-90587	
	Cartridge assembly B42 C.W. (P2)		VS24-90588	
	Cartridge assembly B42 C.W. (P2)		VS24-90589	
	Cartridge assembly 045 C.W. (P2)	VS24-10871		
	Cartridge assembly 045 C.C.W. (P2)	VS24-10872		
	Cartridge assembly 050 C.W. (P2)	VS24-40387		
	Cartridge assembly 050 C.C.W. (P2)	VS24-40388		
12a	Port plate - rear Bi-dir (Except cam ring 045-050)		H-034-67484	1
	Port plate - rear C.W (Only cam ring 045-050)	H-034-67474		
	Port plate - rear C.C.W (Only cam ring 045-050)	H-034-67475		
12b	Pin vane holdout (Except cam ring 045-050)		V034-59098	12
	Pin vane holdout (Only cam ring 045-050)	V034-59130		10
12c	Vane (Except cam ring 045-050)		H-034-67453	12
	Vane (Only cam ring 045-050)	V034-53588		10
12d	Cam ring - B14		H-034-67469	1
	Cam ring - B17		H-034-67470	
	Cam ring - B20		H-034-67159	
	Cam ring - B22		H-034-67482	
	Cam ring - B24		H-034-67158	
	Cam ring - B28		H-034-67157	
	Cam ring - B31		H-034-67156	
	Cam ring - B35		H-034-67155	
	Cam ring - B38		H-034-67154	
	Cam ring - B42		H-034-67153	
	Cam ring - 045	V034-59131		
	Cam ring - 050	V034-66737		
12e	Dowel pin	V324-21612	V324-21612	2
12f	Back-up ring	V618-15017	V618-15017	1
12g	Port plate - pressure Bi-dir (Except cam ring 045-050)		H-034-67479	1
	Port plate - pressure C.W (Only cam ring 045-050)	H-034-67111		
	Port plate - pressure C.C.W (Only cam ring 045-050)	H-034-67113		
12h	Sq. section seal	V691-10232	V691-10232	1
12j	Sq. section seal	V691-10244	V691-10244	1
12k	Rotor-insert ass'y (Except cam ring 045-050)		H-S24-73783	1
	Rotor-insert ass'y (Only cam ring 045-050)	VS24-10121		
12m	Screw	V317-10320	V317-10320	2
12n	Lockwasher internal tooth	V348-10010	V348-10010	2
12p	Dowel pin	V323-82004	V323-82004	1
12q	Bush	V034-70245	V034-70245	1
12r	Sq. section seal	V671-10159	V671-10159	1
13	Cartridge assembly *03 C.W. (P3)	VS24-10749	VS24-10371	1
	Cartridge assembly *03 C.C.W. (P3)	VS24-10750	VS24-10372	
	Cartridge assembly *05 C.W. (P3)	VS24-10751	VS24-10373	
	Cartridge assembly *05 C.C.W. (P3)	VS24-10752	VS24-10374	
	Cartridge assembly *06 C.W. (P3)	VS24-10753	VS24-10375	
	Cartridge assembly *06 C.C.W. (P3)	VS24-10754	VS24-10376	

	Cartridge assembly *08 C.W. (P3)	VS24-10755	VS24-10377	
	Cartridge assembly *08 C.C.W. (P3)	VS24-10756	VS24-10378	
	Cartridge assembly *10 C.W. (P3)	VS24-10757	VS24-10379	
	Cartridge assembly *10 C.C.W. (P3)	VS24-10758	VS24-10380	
	Cartridge assembly *12 C.W. (P3)	VS24-26482	VS24-26498	
	Cartridge assembly *12 C.C.W. (P3)	VS24-26483	VS24-26499	
	Cartridge assembly *14 C.W. (P3)	VS24-10759	VS24-10381	
	Cartridge assembly *14 C.C.W. (P3)	VS24-10760	VS24-10382	
	Cartridge assembly *15 C.W. (P3)	C-S14-72137	C-S14-72139	
	Cartridge assembly *15 C.C.W. (P3)	C-S14-72138	C-S14-72140	
	Cartridge assembly *17 C.W. (P3)	VS24-10761	VS24-10383	
	Cartridge assembly *17 C.C.W. (P3)	VS24-10762	VS24-10384	
	Cartridge assembly *20 C.W. (P3)	VS24-31023	VS24-40684	
	Cartridge assembly *20 C.C.W. (P3)	VS24-40032	VS24-40685	
	Cartridge assembly *22 C.W. (P3)	VS24-10763	VS24-10385	
	Cartridge assembly *22 C.C.W. (P3)	VS24-10764	VS24-10386	
	Cartridge assembly *25 C.W. (P3)	VS24-10765	VS24-10387	
	Cartridge assembly *25 C.C.W. (P3)	VS24-10766	VS24-10388	
	Cartridge assembly *28 C.W. (P3)	VS24-25547	VS24-25973	
	Cartridge assembly *28 C.C.W. (P3)	VS24-25546	VS24-25974	
	Cartridge assembly *31 C.W. (P3)	VS24-45771	VS24-51341	
	Cartridge assembly *31 C.C.W. (P3)	VS24-45772	VS24-51342	
13a	Port plate - rear (C.W)	V034-59777		1
	Port plate - rear (C.C.W)	V034-59776		
	Port plate - rear (Bi-Dir)		H-034-59118	
13b	Pin vane holdout	V034-59098	V034-59098	10
13c	Vane	V034-59099	V034-59099	10
13d	Cam ring - 003	V034-59050	V034-59050	1
	Cam ring - 005	V034-59051	V034-59051	
	Cam ring - 006	V034-59052	V034-59052	
	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	
13e	Dowel pin	V324-21208	V324-21208	2
13f	Back-up ring	V618-15016	V618-15016	1
13g	Port plate - pressure (C.W)	V034-59773		1
	Port plate - pressure (C.C.W)	V034-59772		
	Port plate -pressure (Bi-Dir)		H-034-66453	
13h	Sq. section seal		V691-10229	1
13j	Sq. section seal		V691-10238	1
13k	Screw		V317-06266	2

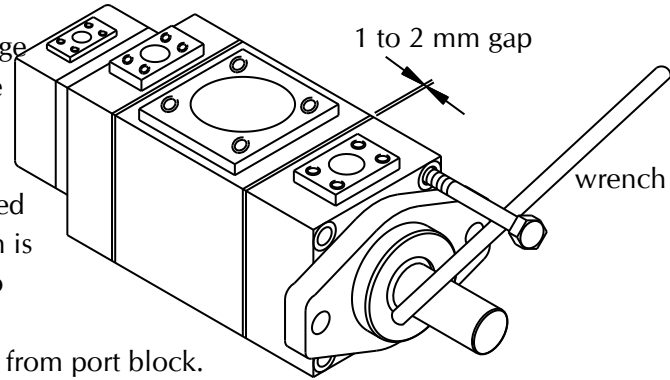
Item pos.	Description	Part No.		Qty
		VT67EDC (Standard)	VT67EDC (Bi-dir plates) (Only for P2 & P3)	
13m	Dowel pin	V323-82010	V323-82010	1
13n	Bearing bush	V034-59412	V034-59412	1
13p	Rotor-insert ass'y	VS24-10350	VS24-10350	1
13q	Sq. section seal	V671-10156	V671-10156	1
11f, 11h, 11j, 11q	Seal kit (S1 - 0,7 bar)	VS24-44823	VS24-44823	1
12f, 12h, 12j, 12r	Seal kit (S4 - 7 bar)	VS24-44823-4	VS24-44823-4	
13f, 13h, 13j, 13q	Seal kit (S5 - 7 bar)	VS24-44823-5	VS24-44823-5	
11a,	Port plate - rear ass'y C.W. (P1)	VS24-73820		1
11p	Port plate - rear ass'y C.C.W. (P1)	VS24-76213		
12a,	Port plate - rear and bush ass'y (Except cam rings 045-050) (P2)		VS24-90562	1
12p,	Port plate - rear and bush ass'y C.W (Only cam ring 045-050) (P2)	VS24-76148		
12q	Port plate - rear and bush ass'y C.C.W (Only cam ring 045-050) (P2)	VS24-76149		
13a,	Port plate - rear and bush ass'y C.W (P3)	VS24-10807		1
13p,	Port plate - rear and bush ass'y C.C.W (P3)	VS24-10808		
13n	Port plate - rear and bush ass'y Bi-Dir (P3)		VS24-10349	

* 0 - Standard B - Bi-directional plates

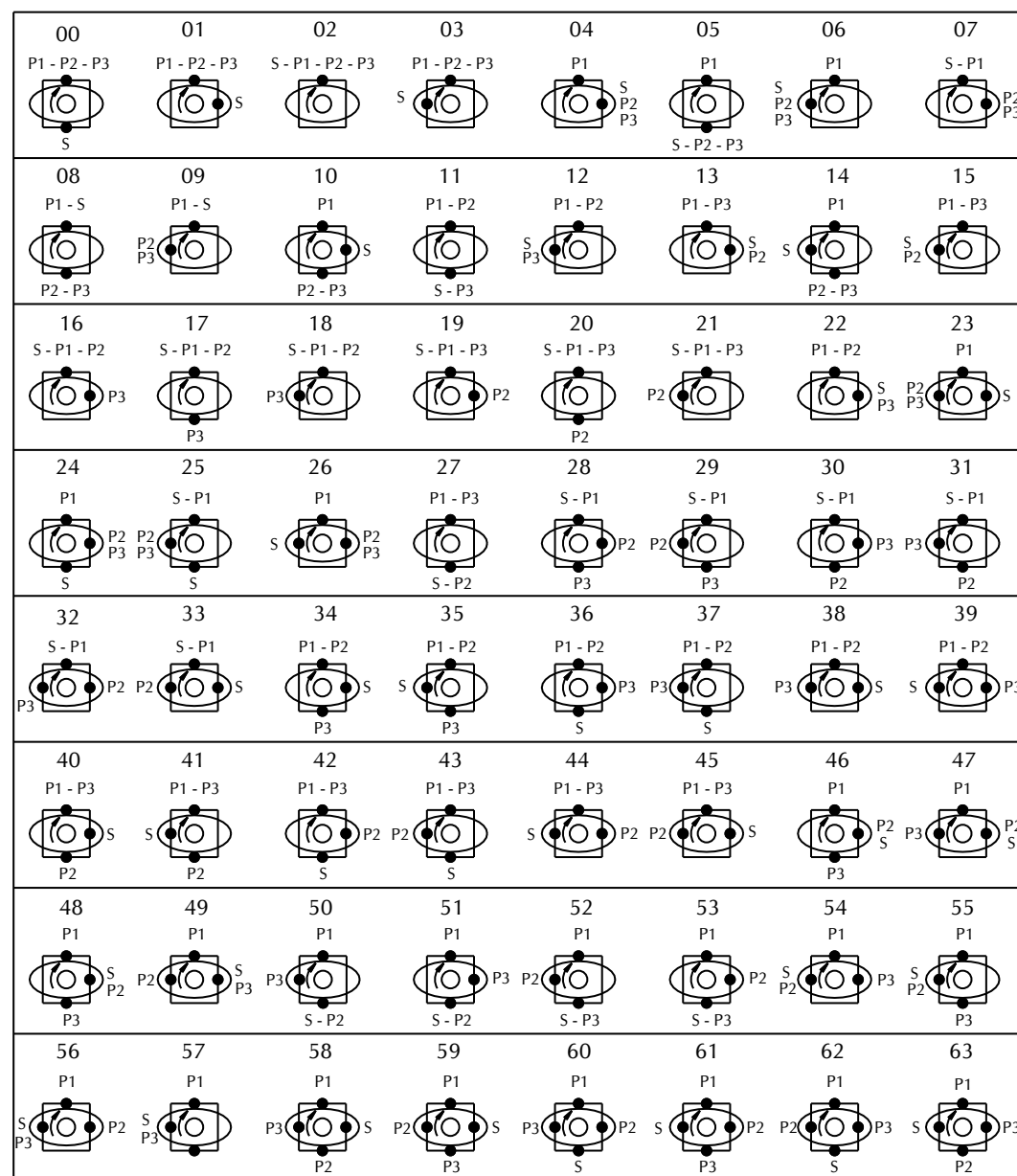
To change porting position, follow the steps below:

- 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 torque.
- To change P2 position, remove 4 bolts from port block. Remove 2 bolts (diagonally opposite) from end cap and insert them halfway to end cap. Install a wrench between these two bolts and turn in the desired way, so that required position of P2 port with respect to suction is obtained.
- Follow the similar procedure for changing P3 position. Use wrench between two bolts placed diagonally opposite.

Instruction : Do not remove mounting flange/port block/end cap completely from the housing/ port block cartridge pin to move out from the housing dowel pin hole, make sure no piece of paint enters in to the gap to avoid leakage. If it is difficult to turn housing put some hydraulic oil to the pressure ports to lubricate the pressure port seals.



PORTING COMBINATION



MODEL CODE

VT67EDC or T67EDCS - 066 - B35 - B10 1 R 00 - A 1 M1 - *

Series

T67EDC Series -250 B4HW
ISO 4 bolts 3019-2 Mounting flange
T67EDCS Series -SAE E
Mounting flange J744

Cam ring — Displacement — Cam ring — Displacement
in³/rev (cm³/rev) in³/rev (cm³/rev)

042 = 8.07 (132.30)	057 = 11.18 (183.20)
045 = 8.70 (142.40)	062 = 12.00 (196.60)
050 = 9.67 (158.50)	066 = 13.00 (213.00)
052 = 10.00 (164.80)	072 = 13.86 (227.20)
054 = 11.02 (180.70)	085 = 16.40 (269.80)

Cam ring — Displacement — Cam ring — Displacement
in³/rev (cm³/rev) in³/rev (cm³/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 (81.1)	045 = 8.89 (145.7)
B28 = 5.49 (89.9)	050 = 9.64 (158.0)

Cam ring — Displacement — Cam ring — Displacement
in³/rev (cm³/rev) in³/rev (cm³/rev)

003/B03 = 0.66 (10.8)	017/B17 = 3.56 (58.3)
005/B05 = 1.05 (17.2)	020/B20 = 3.89 (63.7)
006/B06 = 1.30 (21.3)	022/B22 = 4.29 (70.3)
008/B08 = 1.61 (26.3)	025/B25 = 4.84 (79.3)
010/B10 = 2.08 (34.0)	028/B28 = 5.42 (88.8)
012/B12 = 2.26 (37.0)	031/B31 = 6.10 (100.0)
014/B14 = 2.81 (46.0)	

Modification

Mounting W/connection variables

P = 1-1/2" , P2 = 1-1/4" , S = 4"			
Type	P3	UNC	Metric
T67EDC	1"		M0
T67EDC	3/4"		M1
T67EDCS	1"	00	M0
T67EDCS	3/4"	01	M1

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

Type of Shaft T67EDC

- 1 = Keyed (G45N-ISO3019-2)

Type of Shaft T67EDCS

- 2 = Keyed (SAE D&E)
- 3 = Splined (SAE D&E)

Veljan Hydrair Limited , Balanagar , Hyderabad - 500 037 , INDIA . Phone : ++91 40 23772794,95 FAX : ++91 40 23773963 , E-mail : info@veljan.com

Rights of alteration reserved

Print	
Replace	—
Revision	—

Printed in India