



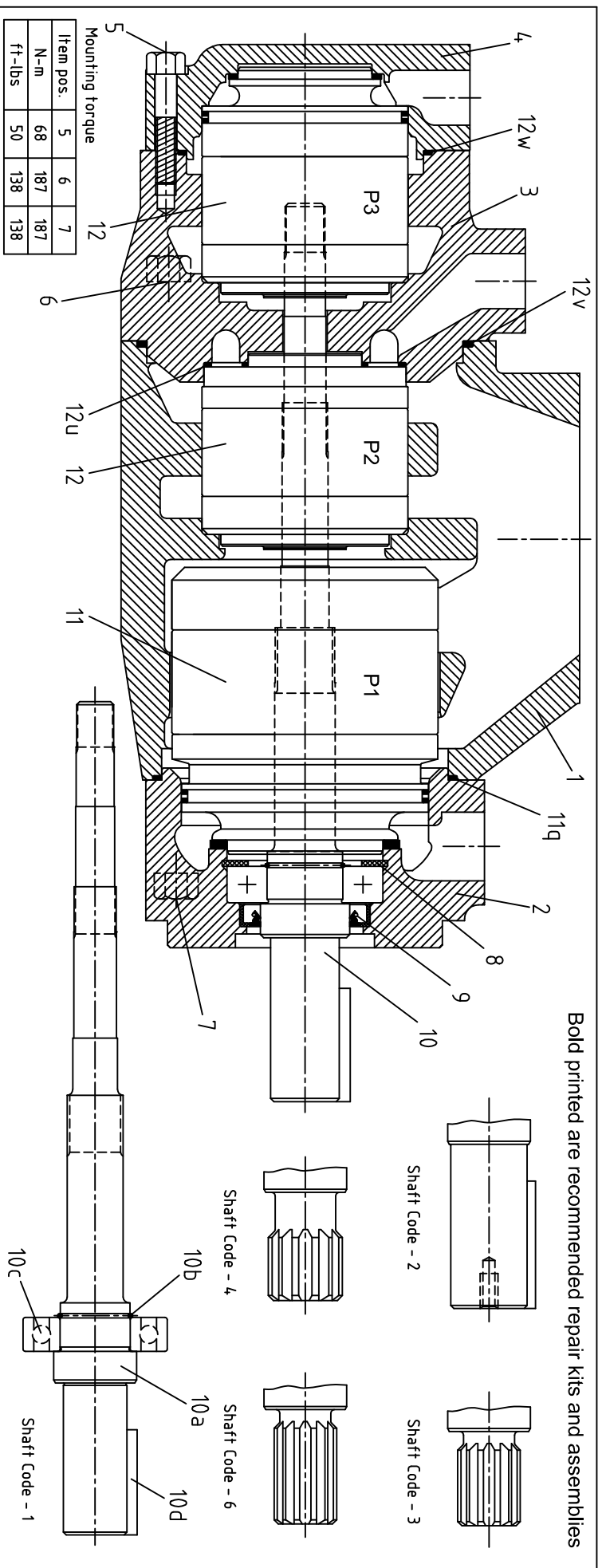
VELJAN

Service Information SS4-00152

VT6DCCR

Triple vane pump

Bold printed are recommended repair kits and assemblies

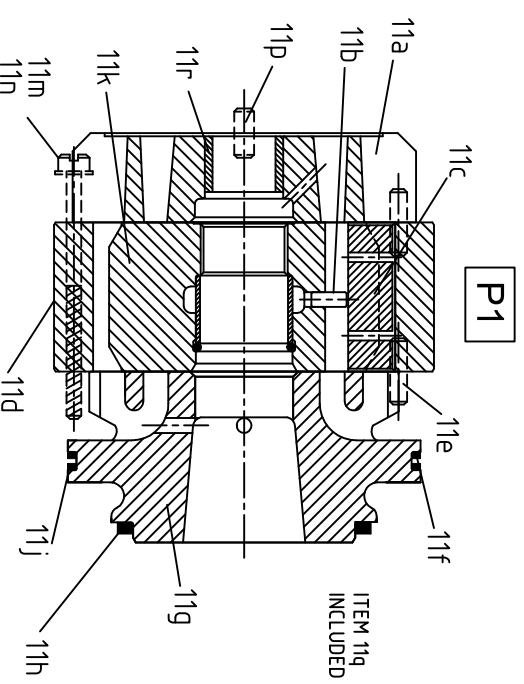
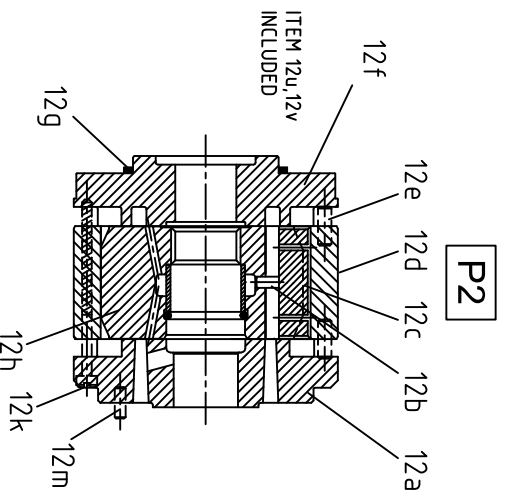
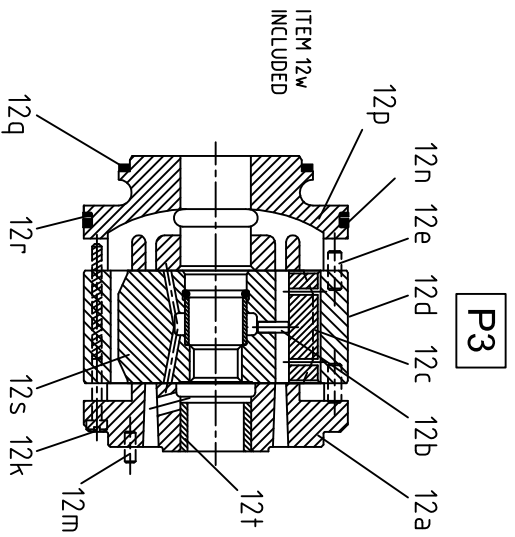


Item pos.	Description	Part No.			Qty
		VT6DCCR (Standard)	VT6DCCR (Bi-dir plates)	VT6DCCRM	
1	Housing (UNC)	V034-66497	V034-66497	V034-66497	1
	Housing (Metric)	H-034-66763	H-034-66763	H-034-66763	
2	Mounting flange (UNC)	V034-66495	V034-66495	V034-66495	1
	Mounting flange (Metric)	C-SK-00220	C-SK-00220	C-SK-00220	
3	Port block (UNC)	V034-66499	V034-66499	V034-66499	1
	Port block (Metric)	H-034-66764	H-034-66764	H-034-66764	
4	End cap (UNC) (P3 = 3/4")	H-034-66797	H-034-66797	H-034-66797	1
	End cap (UNC) (P3 = 1")	H-034-66798	H-034-66798	H-034-66798	
	End cap (Metric) (P3 = 3/4")	H-034-66757	H-034-66757	H-034-66757	
	End cap (Metric) (P3 = 1")	H-034-66793	H-034-66793	H-034-66793	
5	Mounting Screw	V306-40111	V306-40111	V306-40111	7
6	Mounting Screw	V306-40154	V306-40154	V306-40154	4
7	Mounting Screw	V306-40156	V306-40156	V306-40156	4

Item pos.	Description	Part No.			Qty
		VT6DCCR (Standard)	VT6DCCR (Bi-dir plates)	VT6DCCRM	
8	Retaining ring	V356-32283	V356-32283	V356-32283	1
9	Shaft seal (S1-0.7 bar)	V620-82064	V620-82064	V620-82064	1
	Shaft seal (S4-S5-7 bar)	V620-82072	V620-82072	V620-82072	
10	Shaft and bearing ass'y (Code-2)	VS24-45371	VS24-45371	VS24-45371	1
	Shaft and bearing ass'y (Code-3)	VS24-40638	VS24-40638	VS24-40638	
10a	Shaft (Keyed) (Code-2)	V034-66513	V034-66513	V034-66513	1
	Shaft (Splined) (Code-3)	V034-66511	V034-66511	V034-66511	
10b	Round section ring	V034-70853	V034-70853	V034-70853	1
10c	Ball bearing	V230-00207	V230-00207	V230-00207	1
10d	Key (Code -2)	V034-70330	V034-70330	V034-70330	1

11	Cartridge assembly *14 C.W. (P1)	VS24-33849	C-S14-71583	VS24-40789	1
	Cartridge assembly *14 C.C.W. (P1)	VS24-40598	C-S14-71584	VS24-40790	
	Cartridge assembly *17 C.W. (P1)	VS24-58996	C-S14-72346	VS24-63325	
	Cartridge assembly *17 C.C.W. (P1)	VS24-58997	C-S14-72347	VS24-64242	
	Cartridge assembly *20 C.W. (P1)	VS24-26486	C-S14-71585	VS24-30139	
	Cartridge assembly *20 C.C.W. (P1)	VS24-26487	C-S14-71586	VS24-30140	
	Cartridge assembly *24 C.W. (P1)	VS14-97784	VS24-25970	VS24-30141	
	Cartridge assembly *24 C.C.W. (P1)	VS24-25544	C-S14-71587	VS24-30142	

	Cartridge assembly *28 C.W. (P1)	VS24-10837	VS24-10123	VS24-30143	
	Cartridge assembly *28 C.C.W. (P1)	VS24-10838	VS24-10124	VS24-30144	
	Cartridge assembly *31 C.W. (P1)	VS24-10839	VS24-10125	VS24-30145	
	Cartridge assembly *31 C.C.W. (P1)	VS24-10840	VS24-10126	VS24-30146	
	Cartridge assembly *35 C.W. (P1)	VS24-10841	VS24-10127	VS24-30147	
	Cartridge assembly *35 C.C.W. (P1)	VS24-10842	VS24-10128	VS24-30148	
	Cartridge assembly *38 C.W. (P1)	VS24-10843	VS24-10129	VS24-30149	
	Cartridge assembly *38 C.C.W. (P1)	VS24-10844	VS24-10130	VS24-30150	



	Cartridge assembly *42 C.W. (P1)	VS24-10845	VS24-10131	VS24-30151	
	Cartridge assembly *42 C.C.W. (P1)	VS24-10846	C-S14-71588	VS24-30152	
	Cartridge assembly *45 C.W. (P1)	VS24-10847	VS24-10136	VS24-30153	
	Cartridge assembly *45 C.C.W. (P1)	VS24-10848	C-S14-71589	VS24-30154	
	Cartridge assembly *50 C.W. (P1)	VS24-40028	VS24-40610	VS24-40030	
	Cartridge assembly *50 C.C.W. (P1)	VS24-40029	C-S14-71590	VS24-40031	
	Cartridge assembly *61 C.W. (P1)	C-S14-71608	C-S14-71610	C-S14-71612	
	Cartridge assembly *61 C.C.W. (P1)	C-S14-71609	C-S14-71611	C-S14-71613	
11a	Port plate - rear C.W.	VO34-59810			1
	Port plate - rear C.C.W.	VO34-59811			
	Port plate - rear Bi-dir		VO34-59101	VO34-59101	
11b	Pin vane holdout	VO34-59130	VO34-59130	VO34-24984	10
	Vane	VO34-53588	VO34-53588	VO34-53588	10
	Cam ring - 014	VO34-66708	VO34-66708	VO34-66708	1
	Cam ring - 017	VO34-67028	VO34-67028	VO34-67028	1
	Cam ring - 020	VO34-66596	VO34-66596	VO34-66596	1
	Cam ring - 024	VO34-59294	VO34-59294	VO34-59294	1

	Cam ring - 028	VO34-59133	VO34-59133	VO34-59133	1
	Cam ring - 031	VO34-59135	VO34-59135	VO34-59135	1
	Cam ring - 035	VO34-59137	VO34-59137	VO34-59137	1
	Cam ring - 038	VO34-59139	VO34-59139	VO34-59139	1
	Cam ring - 042	VO34-59132	VO34-59132	VO34-59132	1
	Cam ring - 045	VO34-59131	VO34-59131	VO34-59131	1
	Cam ring - 050	VO34-66737	VO34-66737	VO34-66737	1
	Cam ring - 061	VO34-67127	VO34-67127	VO34-67127	2
11e	Dowel pin	V324-21612	V324-21612	V324-21612	1
11f	Back-up ring	V618-15017	V618-15017	V618-15017	1
	Port plate - pressure C.W.	VO34-59808			1
11g	Port plate - pressure Bi-dir	VO34-59809			1
	Port plate - pressure Bi-dir		VO34-59057	VO34-59057	1
11h	Sq. section seal	V691-10232	V691-10232	V691-10232	1
11j	Sq. section seal	V691-10244	V691-10244	V691-10244	1
11k	Rotor-insert ass'y	VS24-10121	VS24-10121	VS24-30018	1
11m	Screw	V317-10320	V317-10320	V317-10320	1

11n	Lockwasher internal tooth	V348-10010	V348-10010	V348-10010	1
11p	Dowel pin	V323-82004	V323-82004	V323-82004	1
11q	Sq. section seal	V671-10159	V671-10159	V671-10159	1
11r	Bush	V034-70868	V034-70868	V034-70868	1
12	Cartridge assembly *03 C.C.W. (P2)	V324-25551	C-S14-71692	V324-40505	1
	Cartridge assembly *03 C.C.W. (P2)	V324-25561	C-S14-71693	V324-40506	
	Cartridge assembly *05 C.C.W. (P2)	V324-25552	V324-25976	V324-40507	
	Cartridge assembly *05 C.C.W. (P2)	V324-25562	V324-25986	V324-40508	
	Cartridge assembly *06 C.C.W. (P2)	V324-25553	V324-25977	V324-40509	
	Cartridge assembly *06 C.C.W. (P2)	V324-25563	V324-25987	V324-40510	
	Cartridge assembly *08 C.C.W. (P2)	V324-25554	V324-25978	V324-40511	
	Cartridge assembly *08 C.C.W. (P2)	V324-25564	V324-25988	V324-40512	
	Cartridge assembly *10 C.C.W. (P2)	V324-25555	V324-25979	V324-40513	
	Cartridge assembly *10 C.C.W. (P2)	V324-25565	V324-25989	V324-40514	
	Cartridge assembly *12 C.C.W. (P2)	V324-26484	C-S14-71694	V324-40515	
	Cartridge assembly *12 C.C.W. (P2)	V324-26485	C-S14-71695	V324-40516	
	Cartridge assembly *14 C.C.W. (P2)	V324-25556	C-S14-71696	V324-40517	
	Cartridge assembly *14 C.C.W. (P2)	V324-25566	C-S14-71697	V324-40518	
	Cartridge assembly *17 C.C.W. (P2)	V324-25557	V324-25981	V324-40519	
	Cartridge assembly *17 C.C.W. (P2)	V324-25567	V324-25991	V324-40520	
	Cartridge assembly *20 C.C.W. (P2)	V324-40352	C-S14-71698	V324-40521	
	Cartridge assembly *20 C.C.W. (P2)	V324-40353	C-S14-71699	V324-40522	
	Cartridge assembly *22 C.C.W. (P2)	V324-25558	V324-25982	V324-40523	
	Cartridge assembly *22 C.C.W. (P2)	V324-25568	V324-25992	V324-40524	
	Cartridge assembly *25 C.C.W. (P2)	V324-25559	V324-25983	V324-40525	
	Cartridge assembly *25 C.C.W. (P2)	V324-25569	V324-25993	V324-40526	
	Cartridge assembly *28 C.C.W. (P2)	V324-25560	V324-25984	V324-40527	
	Cartridge assembly *28 C.C.W. (P2)	V324-25570	V324-25994	V324-40528	
	Cartridge assembly *31 C.C.W. (P2)	V324-45773	C-S14-71700	V324-45777	
	Cartridge assembly *31 C.C.W. (P2)	V324-45774	C-S14-71701	V324-45778	
	Cartridge assembly *03 C.C.W. (P3)	V324-10749	V324-10371	V324-40200	1
	Cartridge assembly *03 C.C.W. (P3)	V324-10750	V324-10372	V324-40201	
	Cartridge assembly *05 C.C.W. (P3)	V324-10751	V324-10373	V324-40202	
	Cartridge assembly *05 C.C.W. (P3)	V324-10752	V324-10374	V324-40203	
	Cartridge assembly *06 C.C.W. (P3)	V324-10753	V324-10375	V324-40204	
	Cartridge assembly *06 C.C.W. (P3)	V324-10754	V324-10376	V324-40205	
	Cartridge assembly *08 C.C.W. (P3)	V324-10755	V324-10377	V324-40206	
	Cartridge assembly *08 C.C.W. (P3)	V324-10756	V324-10378	V324-40207	
	Cartridge assembly *10 C.C.W. (P3)	V324-10757	V324-10379	V324-40208	
	Cartridge assembly *10 C.C.W. (P3)	V324-10758	V324-10380	V324-40209	
	Cartridge assembly *12 C.C.W. (P3)	V324-26482	V324-26498	V324-40210	
	Cartridge assembly *12 C.C.W. (P3)	V324-26483	V324-26499	V324-40211	
	Cartridge assembly *14 C.C.W. (P3)	V324-10759	V324-10381	V324-40212	
	Cartridge assembly *14 C.C.W. (P3)	V324-10760	V324-10382	V324-40213	

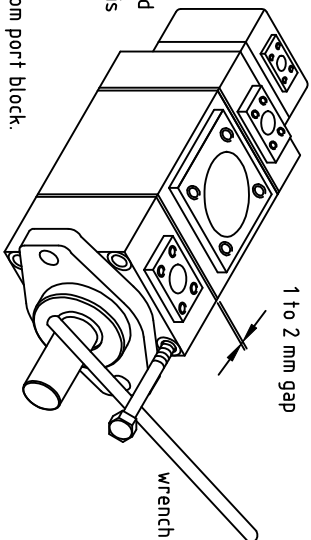
12a	Port plate - rear C.W.	V034-59777			2
	Port plate - rear C.C.W.	V034-59776			
	Port plate - rear Bi-dir				
12b	Pin vane holdout	V034-59098	V034-59098	V034-24982	20
12c	Vane	V034-59099	V034-59099	V034-66716	20
12d	Cam ring - 003	V034-59050	V034-59050	V034-59050	2
	Cam ring - 005	V034-59051	V034-59051	V034-59051	
	Cam ring - 006	V034-59052	V034-59052	V034-59052	
	Cam ring - 008	V034-59053	V034-59053	V034-59053	
	Cam ring - 010	V034-59054	V034-59054	V034-59054	
	Cam ring - 012	V034-66595	V034-66595	V034-66595	
	Cam ring - 014	V034-59206	V034-59206	V034-59206	
	Cam ring - 017	V034-59207	V034-59207	V034-59207	
	Cam ring - 020	V034-66607	V034-66607	V034-66607	
	Cam ring - 022	V034-59208	V034-59208	V034-59208	
	Cam ring - 025	V034-59209	V034-59209	V034-59209	
	Cam ring - 028	V034-59245	V034-59245	V034-59245	
	Cam ring - 031	V034-66843	V034-66843	V034-66843	
12e	Dowel pin	V324-21208	V324-21208	V324-21208	4
12f	Port plate - pressure C.W.	V034-66521			1
	Port plate - pressure C.C.W.	V034-66522			
	Port plate - pressure		V034-66493	V034-66493	
12g	Sq. section seal	V691-10137	V691-10137	V691-10137	1
12h	Rotor-insert ass'y	V324-10350	V324-10350	V324-33974	1
12k	Screw	V317-06266	V317-06266	V317-06266	4
12m	Dowel pin	V323-82010	V323-82010	V323-82010	2
12n	Sq. section seal	V691-10238	V691-10238	V691-10238	1
12p	Port plate - pressure C.W.	V034-59773			1
	Port plate - pressure C.C.W.	V034-59772			
	Port plate - pressure		V034-66453	V034-66453	

12q	Sq. section seal	V691-10229	V691-10229	V691-10229	1
12r	Back-up ring	V618-15016	V618-15016	V618-15016	1
12s	Rotor-insert ass'y	VS24-10116	VS24-10116	VS24-30049	1
12t	Bush	C-SK-00289	C-SK-00289	C-SK-00289	1
12u	Sq. section seal	V691-10153	V691-10153	V691-10153	1
12v	Sq. section seal	V691-10256	V691-10256	V691-10256	1
12w	Sq. section seal	V671-10156	V671-10156	V671-10156	1
9, 11f	Seal kit (S1 - 0.7 bar)	VS24-45299-0	VS24-45299-0	VS24-45299-0	1
11h, 11j	Seal kit (S4 - 7 bar)	VS24-45299-4	VS24-45299-4	VS24-45299-4	1
11q, 12g	Seal kit (S5 - 7 bar)	VS24-45299-5	VS24-45299-5	VS24-45299-5	1
12n, 12q					
12r, 12u					
12v, 12w					
11a	Port plate - rear and bush ass'y C.W. (P1)	VS24-10829			1
11p	Port plate - rear and bush ass'y C.C.W. (P1)	VS24-10830			
	Port plate - rear and bush ass'y Bi-dir (P1)		VS24-10122	VS24-10122	
12a	Port plate - rear ass'y C.W. (P2)	VS24-10806			1
	Port plate - rear ass'y C.C.W. (P2)	VS24-10805			
	Port plate - rear ass'y Bi-dir (P2)		VS24-10418	VS24-10418	
12a	Port plate - rear and bush ass'y C.W. (P3)	VS24-10807			1
12t	Port plate - rear and bush ass'y C.C.W. (P3)	VS24-10808			
	Port plate - rear and bush ass'y Bi-dir (P3)		VS24-10349	VS24-10349	

* 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 torque.
2. 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.
3. 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

00		01		02		03		04		05		06		07	
08		09		10		11		12		13		14		15	
16		17		18		19		20		21		22		23	
24		25		26		27		28		29		30		31	
32		33		34		35		36		37		38		39	
40		41		42		43		44		45		46		47	
48		49		50		51		52		53		54		55	
56		57		58		59		60		61		62		63	

MODEL CODE

VT6DCCR - 038 - 028 - 008 - 2 R 00 - A 1 - 00 - *

Series

Rear cap end for mounting

SAE "A" auxiliary pump

coupling adaptor

SAE "A" -9 teeth

Cam ring for "P1"

Volumetric displacement cm³/rev (in³/rev)

014/B14 = 47.6 (2.90)	035/B35 = 111.0 (6.77)
017/B17 = 58.2 (3.55)	038/B38 = 120.3 (7.34)
020/B20 = 66.0 (4.03)	042/B42 = 136.0 (8.30)
024/B24 = 79.5 (4.85)	045/B45 = 145.7 (8.89)
028/B28 = 89.7 (5.47)	050/B50 = 158.0 (9.64)
031/B31 = 98.3 (6.00)	061/B61 = 190.5 (11.62)

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

Cam ring for "P2" & "P3"

Volumetric displacement cm³/rev (in³/rev)

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

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

Modifications

Mounting w/ connection variables

	UNC	METRIC
P3	00 01	M0 M1
	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

Porting combination (see page A1-4-4)

00 = Standard

Direction of rotation (view on shaft end)

- R - Clockwise
- L - Counter - clockwise

Type of Shaft

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

Veljan Hydrain Limited, Balanagar, Hyderabad - 500 037, INDIA. Phone : ++91 40 3772794, 95 FAX : ++91 40 3773963, E-mail :

Rights of alteration reserved

Print	—
Replace	—
Revision	—

Printed in India