



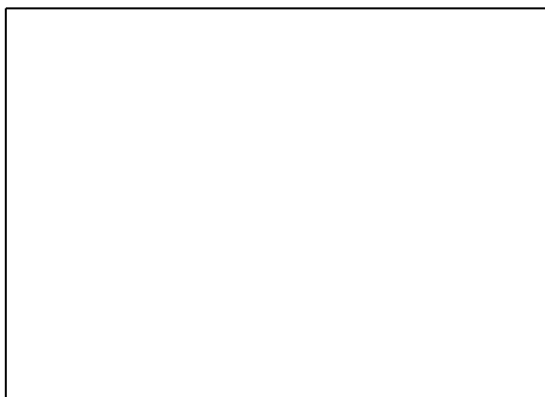
VELJAN

Service Information

SS4 - 00117

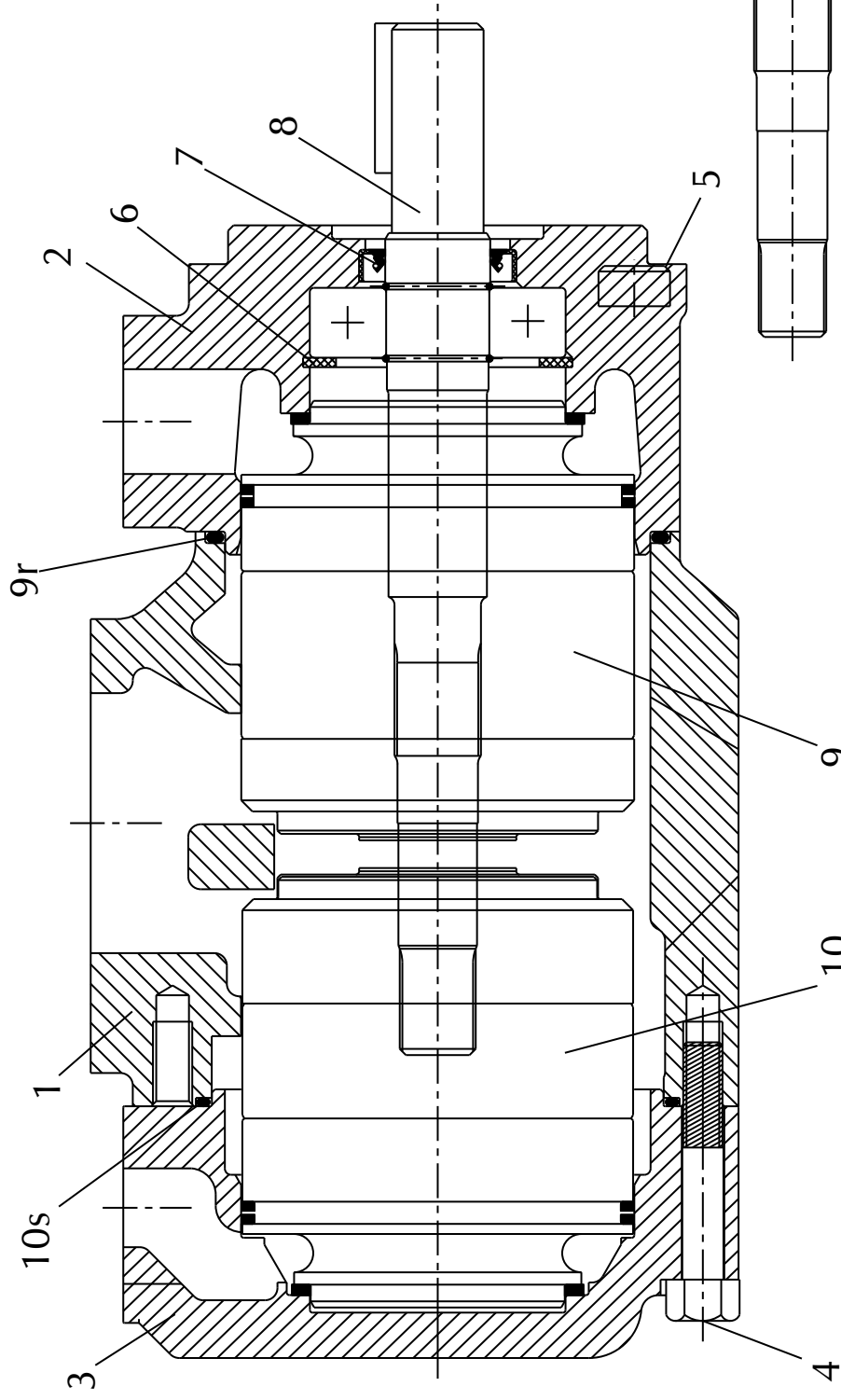
VT67CB

Double vane pump

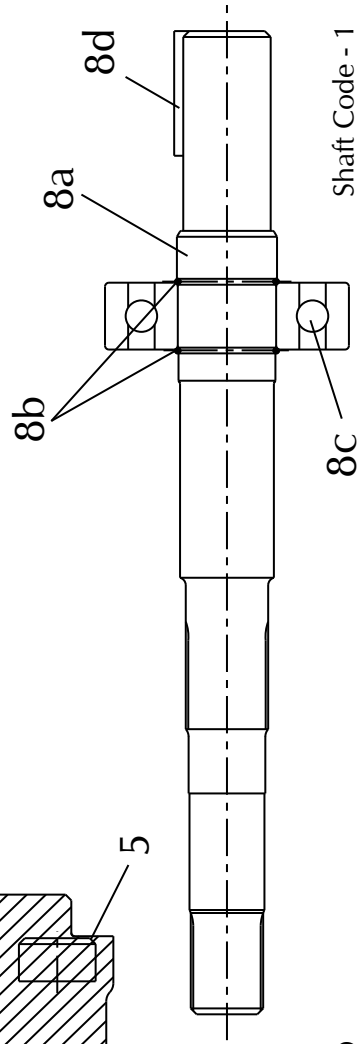


PHOTO

Bold printed are recommended repair kits and assemblies

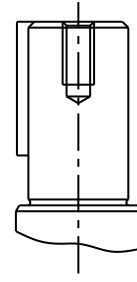
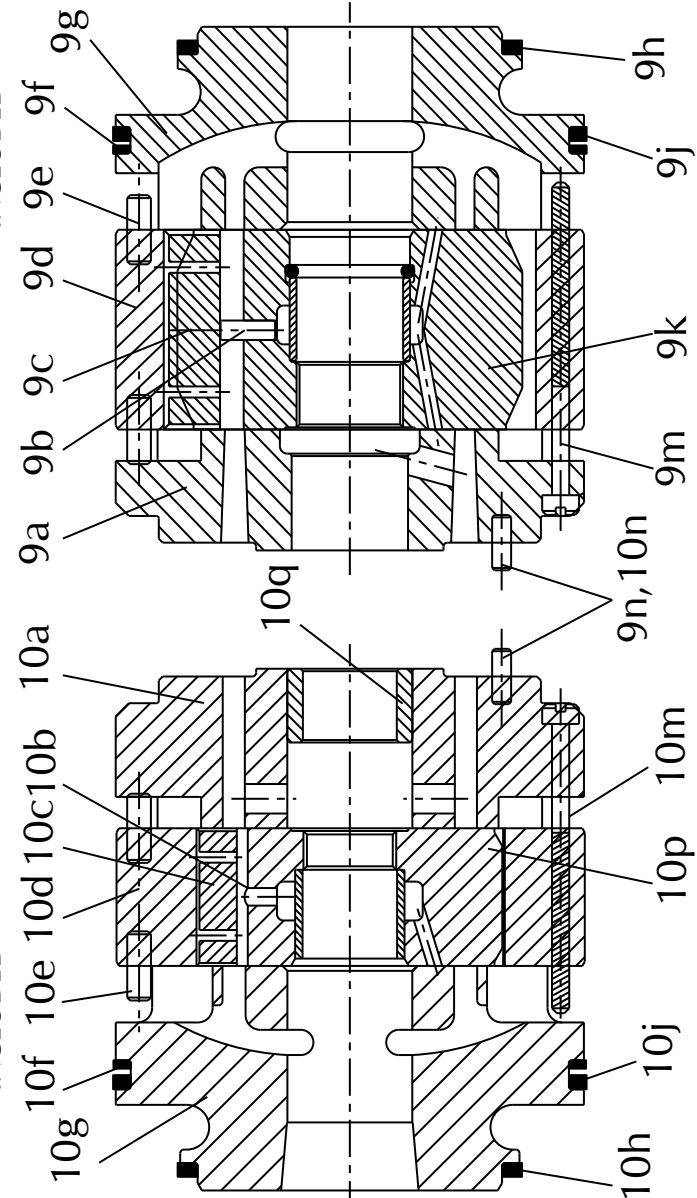


Mounting torque		4	5
Item pos.		4	5
ft-lbs		45	117
N-m		61	159

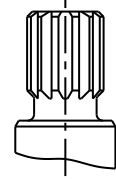


P1 ITEM 9r INCLUDED

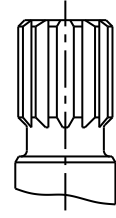
P2 ITEM 10s INCLUDED



Shaft Code - 2



Shaft Code - 3



Shaft Code - 5

Item pos.	Description	Part No.		Qty
		VT67CB (Standard)	VT67CB (Bi-dir plates)	
1	Housing (UNC) (S = 2½")	V034-59125	V034-59125	1
	Housing (Metric) (S = 2½")	H-034-66509	H-034-66509	
2	Mounting flange (UNC) (for Shafts 1-3-5)	V034-59107	V034-59107	1
	Mounting flange (Metric) (for Shafts 1-3-5)	H-034-66690	H-034-66690	
	Mounting flange (UNC) (for Shaft - 2)	H-034-66579	H-034-66579	
	Mounting flange (Metric) (for Shaft - 2)	H-034-66507	H-034-66507	
3	End cap (UNC) (P2 = ¾")	V034-59425	V034-59425	1
	End cap (Metric) (P2 = ¾")	H-034-66508	H-034-66508	
4	Mounting Screw	V306-40094	V306-40094	7
5	Mounting Screw	V358-20320	V358-20320	4
6	Retaining ring	V356-30244	V356-30244	1
7	Shaft seal (S1-0.7 bar) (for Shafts 1-3-5)	V620-82012	V620-82012	1
	Shaft seal (S4-S5-7 bar) (for Shafts 1-3-5)	V620-82068	V620-82068	
	Shaft seal (S1-0.7 bar) for Shaft - 2)	V620-82046	V620-82046	
	Shaft seal (S4-0.7 bar) (for Shaft - 2)	V620-82046-4	V620-82046-4	
	Shaft seal (S5-0.7 bar) (for Shaft - 2)	V620-82046-5	V620-82046-5	
8	Shaft and bearing ass'y (Code-1)	VS24-10346	VS24-10346	1
	Shaft and bearing ass'y (Code-2) (VT67CBW)	VS24-26208	VS24-26208	
	Shaft and bearing ass'y (Code-3)	VS24-10348	VS24-10348	
	Shaft and bearing ass'y (Code-5)	VS24-10347	VS24-10347	
8a	Shaft (Keyed) (Code-1)	V034-59110	V034-59110	1
	Shaft (Keyed) (Code-2) (VT67CBW)	H-034-66576	H-034-66576	
	Shaft (Splined) (Code-3)	V034-59108	V034-59108	
	Shaft (Splined) (Code-5)	V034-59109	V034-59109	
8b	Round section ring (1-3-5)	V034-70777	V034-70777	2
	Round section ring (2)	V034-70777	V034-70777	1
8c	Ball bearing	V230-82054	V230-82054	1
8d	Key (Code -1)	V034-49622	V034-49622	1
	Key (Code -2)	V034-48690	V034-48690	
9	Cartridge assembly *03 C.W. (P1)	VS24-10731	VS24-58882	
	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	V034-59777		1

Item pos.	Description	Part No.		Qty
		VT67CB (Standard)	VT67CB (Bi-dir plates)	
	Port plate - rear C.C.W	V034-59776		
	Port plate - rear (Bi-dir)		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	
	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	
9e,10e	Dowel pin	V324-21208	V324-21208	4
9f,10f	Back-up ring	V618-15016	V618-15016	2
9g	Port plate - pressure C.W	V034-59772		1
	Port plate - pressure C.C.W	V034-59773		
	Port plate - pressure Bi-dir		H-034-66453	
9h,10h	Sq. section seal	V691-10229	V691-10229	2
9j,10j	Sq. section seal	V691-10238	V691-10238	2
9k	Rotor-insert ass'y (P1)	VS24-10350	VS24-10350	1
9m,10m	Screw	V317-06266	V317-06266	4
9n,10n	Dowel pin	V323-82010	V323-82010	2
10p	Rotor-insert ass'y (P2)	H-S24-49820	H-S24-49820	1
10q	Bearing bush	V034-59412	V034-59412	1
9r	O' ring	V671-00244	V671-00244	1
10s	Sq. section seal	V671-10156	V671-10156	1
10	Cartridge assembly *02 C.W. (P2)		VS24-50610	1
	Cartridge assembly *02 C.C.W. (P2)		VS24-50611	
	Cartridge assembly *03 C.W. (P2)		VS24-50612	
	Cartridge assembly *03 C.C.W. (P2)		VS24-50613	
	Cartridge assembly *04 C.W. (P2)		VS24-50614	
	Cartridge assembly *04 C.C.W. (P2)		VS24-50615	
	Cartridge assembly *05 C.W. (P2)		VS24-50616	
	Cartridge assembly *05 C.C.W. (P2)		VS24-50617	
	Cartridge assembly *06 C.W. (P2)		VS24-50618	
	Cartridge assembly *06 C.C.W. (P2)		VS24-50619	
	Cartridge assembly *07 C.W. (P2)		VS24-59907	
	Cartridge assembly *07 C.C.W. (P2)		VS24-59908	
	Cartridge assembly *08 C.W. (P2)		VS24-50620	
	Cartridge assembly *08 C.C.W. (P2)		VS24-50621	
	Cartridge assembly *09 C.W. (P2)		VS24-72910	
	Cartridge assembly *09 C.C.W. (P2)		VS24-72697	
	Cartridge assembly *10 C.W. (P2)		VS24-50622	
	Cartridge assembly *10 C.C.W. (P2)		VS24-50623	
	Cartridge assembly *11 C.W. (P2)		VS24-77173	
	Cartridge assembly *11 C.C.W. (P2)		VS24-76880	
Cartridge assembly *12 C.W. (P2)		VS24-59009		
Cartridge assembly *12 C.C.W. (P2)		VS24-59010		
Cartridge assembly *14 C.W. (P2)		VS24-77174		
Cartridge assembly *14 C.C.W. (P2)		VS24-77176		
Cartridge assembly *15 C.W. (P2)		VS24-59011		
Cartridge assembly *15 C.C.W. (P2)		VS24-59012		
10a	Port plate - rear (Bi-dir)		C-034-03220	1
10b	Pin vane holdout		H-034-66920	12

Item pos.	Description	Part No. Part No.		Qty
		VT67CB (Standard)	VT67CB (Bi-dir plates)	
10c	Vane		H-034-66917	12
10d	Cam ring - B02		H-034-66909	1
	Cam ring - B03		H-034-66910	
	Cam ring - B04		H-034-66911	
	Cam ring - B05		H-034-66912	
	Cam ring - B06		H-034-66913	
	Cam ring - B07		H-034-67063	
	Cam ring - B08		H-034-66914	
	Cam ring - B09		H-034-67383	
	Cam ring - B10		H-034-66915	
	Cam ring - B11		H-034-67461	
	Cam ring - B12		H-034-67032	
	Cam ring - B14		H-034-67409	
	Cam ring - B15		H-034-67034	
10g	Port plate - pressure P2 (Bi-dir)		H-034-66923	1
7,9r 9j,9h 9f,10f 10j, 10h	Seal kit (s1-0.7 bar) (for shafts 1-3-5)	VS24-10352	VS24-10352	1
	Seal kit (s4-7 bar) (for shafts 1-3-5)	VS24-10352-4	VS24-10352-4	
	Seal kit (s5-7 bar) (for shafts 1-3-5)	VS24-10352-5	VS24-10352-5	
	Seal kit (s1-0.7 bar) (for shaft 2)	VS14-97724	VS14-97724	
	Seal kit (s4-0.7 bar) (for shaft 2)	VS14-97724-4	VS14-97724-4	
	Seal kit (s5-0.7 bar) (for shaft 2)	VS14-97724-5	VS14-97724-5	
9a,9n	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 10n	Port plate - rear and bush ass'y Bi-dir (P2)		S24-50642	1

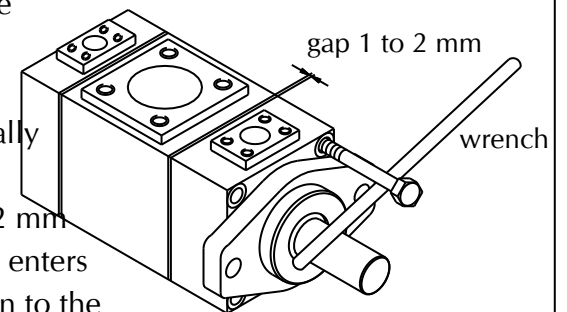
* 0 - Standard B - Bi-directional plates

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

VT67CB W - *22 - B10 - 1 R 00 - A 1 11 - *

Series
VT67CB series- SAE B 2 bolts
Mounting flange J744c

Use for severe duty shaft only

Cam ring	Displacement in ³ /rev (cm ³ /rev)	Cam ring	Displacement in ³ /rev (cm ³ /rev)
003/B03	= 0.66 (10.80)	015/B15	= 3.08 (50.5)
005/B05	= 1.05 (17.20)	017/B17	= 3.56 (58.30)
006/B06	= 1.30 (21.30)	020/B20	= 3.89 (63.80)
008/B08	= 1.61 (26.40)	022/B22	= 4.29 (70.30)
010/B10	= 2.08 (34.10)	025/B25	= 4.84 (79.30)
012/B12	= 2.26 (37.10)	028/B28	= 5.42 (88.80)
014/B14	= 2.81 (46.00)	031/B31	= 6.10 (100.00)

Cam ring	Displacement in ³ /rev (cm ³ /rev)	Cam ring	Displacement in ³ /rev (cm ³ /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)		

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

Type of Shaft

VT67CB

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

VT67CBW

- 2 = Keyed (SAE-BB)

Modification

Port connection variables
SAE 4 bolt flange (J518c)

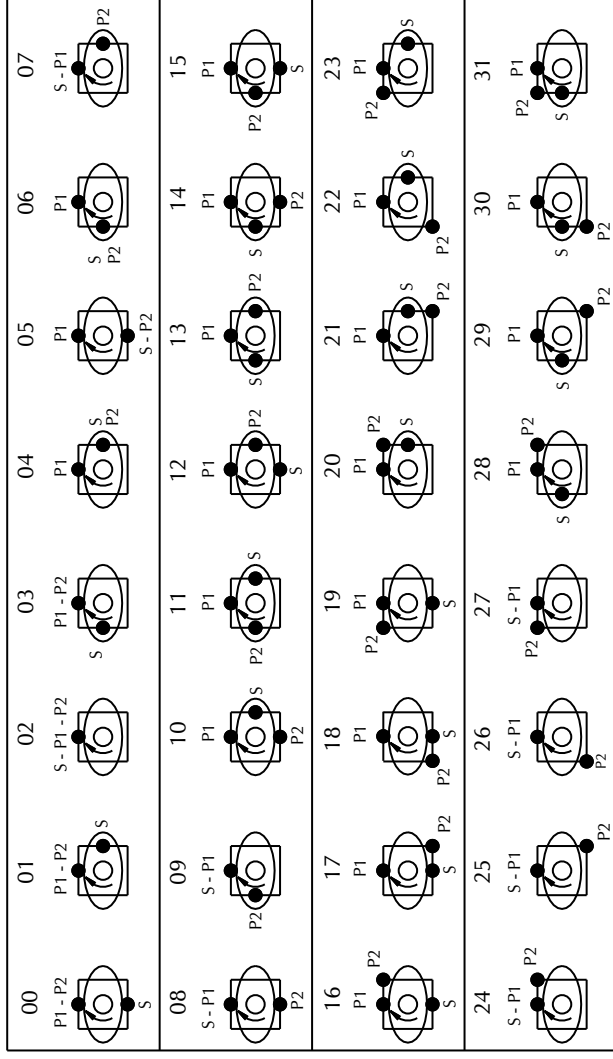
P1 = 1" P2 = 3/4" S = 2 1/2"	
UNC	METRIC
11	M1

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)



Direction of rotation

- R = Clockwise
- L = Counter - clockwise

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

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