CCC Series

Gear Pump Ordering Code

VGP	CCC	b	R	BS_2	1.5	1.0	1.0	5	S1	P2	GB	FB	FB	FB	2	B1
					H1	H2	H3					P1	P2	P3		

Veljan Gear Pump

Series

Pump type
b - Multiple Unit / Triple pump

Rotation
(Viewed from shaft end)
R - Clockwise
L - Counter Clockwise

Mounting type

BS_2 - SAE 'B' 2-bolt
[1)] CS_2 - SAE 'C' 2-bolt

BS_4 - SAE 'B' 4-bolt
[1)] CS_4 - SAE 'C' 4-bolt

Housing for 'H1', 'H2' & H3
(Displacement cc/rev)
1.00 = 15.90 cc/rev
1.25 = 24.00
1.50 = 32.00
1.75 = 40.10
2.00 = 48.10
2.25 = 56.30
2.50 = 64.40

Shaft end details (Shaft type)
4 = 1" KEY SAE BB
5 = 15 SPLINE 1" SAE BB

Seal class
S 1 (for Mineral oil)
S 4 (for fire resistant fluids)
S 5 (for mineral oil and fire resistant fluids)

Port Block type
P0 - No ports
P1 - Pressure (1 Port) - side ported
P2 - Suction & Pressure (2 Ports) - side ported
R1 - Pressure (1 Port) - rear ported
R2 - Suction & Pressure (2 Port) - rear ported

Port connections-INLET
See page 135,136

Ports Position
B3-Three Inlets,
Three Outlets,
B2-Two Inlets,
Three Outlets,

Connecting shaft
(For Multiple pump)
2 - CC

Port connections
OUTLET(P1,P2,P3)
See page 135,136

1) Under development

Performance Data:-

The performance data shown below are the average results based on a series of laboratory tests of production units and are not necessarily representative of any one unit. Test were run with an oil reservoir temperature of 50^{0}C and a viscosity of 38mm^2/S at 40^{0}C.

Note: Pump output flow is at the maximum rated pressure (See page 16, General pump data)

VGP - CCC Performance Data :

C-Series		Gear Housing Widths						
		1.00"	1.25"	1.50"	1.75"	2.00"	2.25"	2.50"
cc/rev		15.90	24.0	32.0	40.10	48.10	56.30	64.40
Pressure	(bar)	240	240	240	240	240	220	200
	(psi)	3500	3500	3500	3500	3500	3250	3000
Max.Speed	(rpm)	3000	3000	3000	3000	3000	3000	3000
Pump Weight	(kg)	17.00	17.02	17.03	18.0	20.0	24.20	25.50

Relational chart for Flow rate & Housing width:

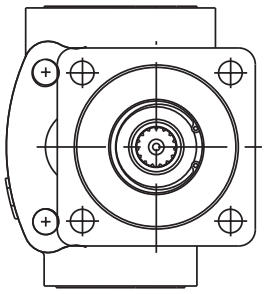
	Speed (rpm)	Gear Housing Widths / Flow Rate [VGP - C Series]													
		1.00"		1.25"		1.5"		1.75"		2.0"		2.25"		2.50"	
		gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
C	1000	4.11	15.59	6.34	24.00	8.40	32.00	10.59	40.10	12.70	48.10	14.87	56.30	17.01	64.40
	1500	5.68	21.50	9.29	35.20	12.21	46.22	15.35	58.10	18.53	70.15	21.69	82.10	24.64	93.30
	2000	7.47	28.30	12.12	45.91	16.34	61.88	20.64	78.15	24.87	94.15	29.11	110.21	33.34	126.22
	2500	9.91	37.52	15.27	57.82	20.66	78.21	25.93	98.15	31.30	118.50	36.60	138.55	41.79	158.21
	3000	11.94	45.21	18.42	69.75	24.86	94.11	31.23	118.21	37.54	142.11	44.07	166.81	50.25	190.22

Relational chart for Housing width & Input Power :

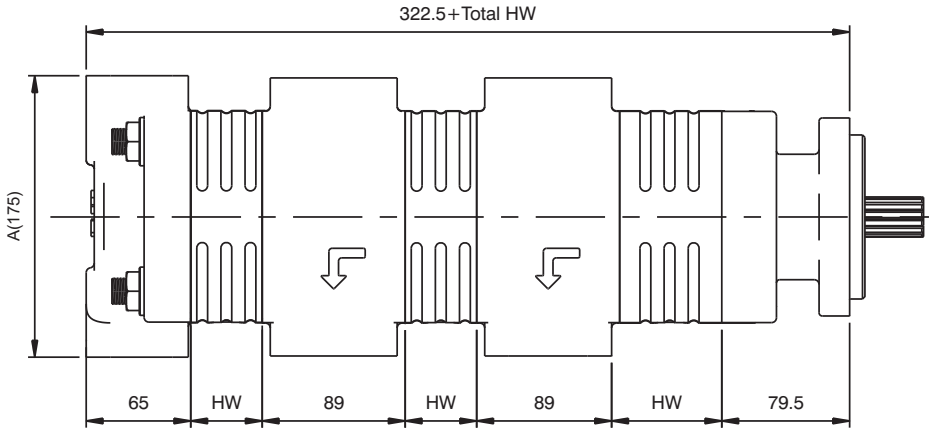
	Speed (rpm)	Gear Housing Widths / Input power [VGP - C Series]													
		1.00"		1.25"		1.5"		1.75"		2.0"		2.25"		2.50"	
		HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW
C	1000	11	8	15	11	20	15	24	18	28	21	31	23	35	26
	1500	16	12	21	16	28	21	35	26	40	30	46	34	50	37
	2000	20	15	28	21	38	28	46	34	54	40	59	44	63	47
	2500	25	19	35	26	46	34	56	42	67	50	72	54	76	57
	3000	30	22	42	31	54	40	67	50	80	60	87	65	92	69

Note: In accordance with our policy of continuous development, we reserve the right to change specifications shown in this catalogue without notice.

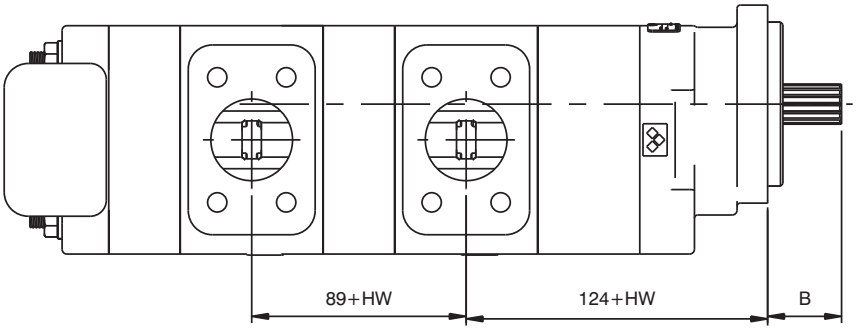
Triple Pump Unit Dimensions of VGP - CCC :-



Side View



Front View



Top View

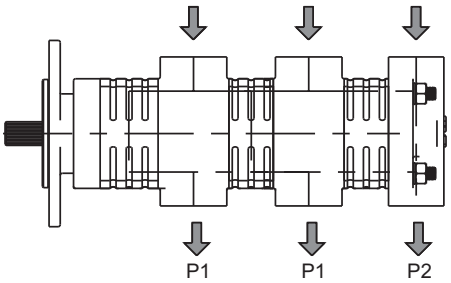
A - Dimension varies with the type of ports.

B - Dimension varies with the type of drive shaft ends.

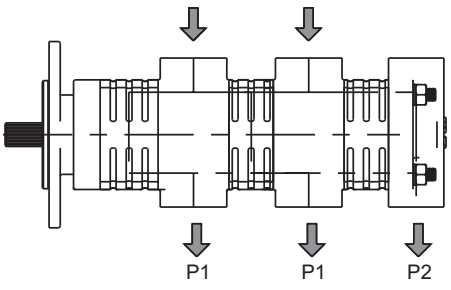
HW - Housing width

VGP-CCC Series			
Housing Width Inches (HW)	Displacement (cc/rev)		
	P1	P2	P2
1.00"	15.90	15.90	15.90
1.25"	24.00	24.00	24.00
1.50"	32.00	32.00	32.00
1.75"	40.10	40.10	40.10
2.00"	48.10	48.10	48.10
2.25"	56.30	56.30	56.30
2.50"	64.40	64.40	64.40

B3 = Three Inlets ; Three Outlets

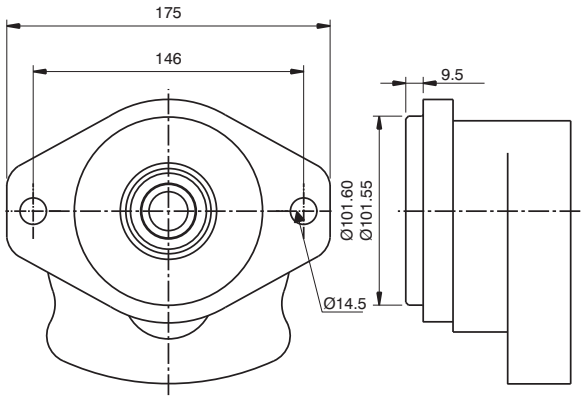


B2 = Two Inlets ; Three Outlets



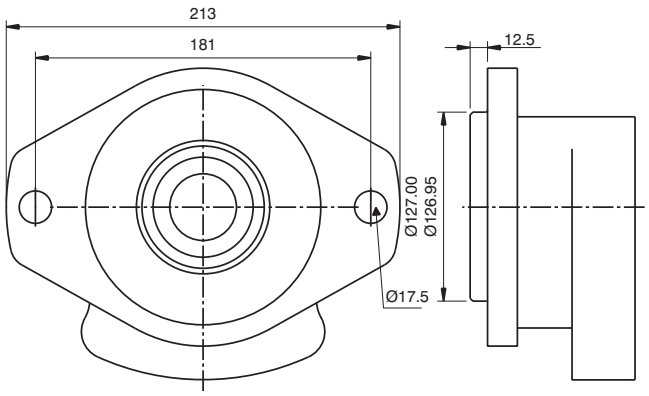
FLANGE DETAILS - 'CCC' Series:-

S.A.E - "B" 2 - BOLT FLANGE



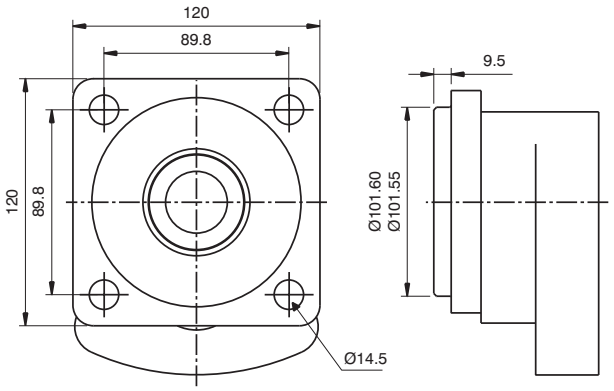
Code - BS_2

***S.A.E - "C" 2 - BOLT FLANGE**



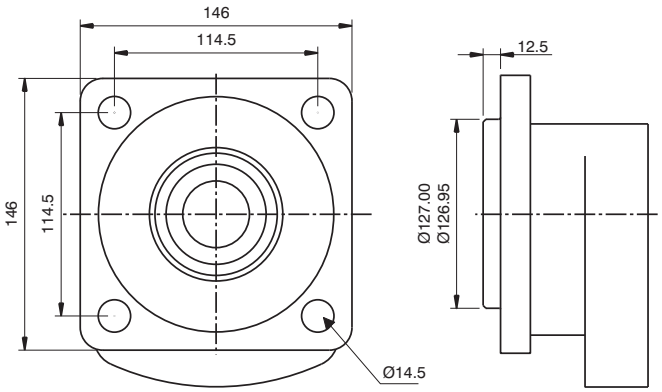
Code - CS_2

S.A.E - "B" 4 - BOLT FLANGE



Code - BS_4

***S.A.E - "C" 4 - BOLT FLANGE**



Code - CS_4

Unit dimensions of VGP-CCC

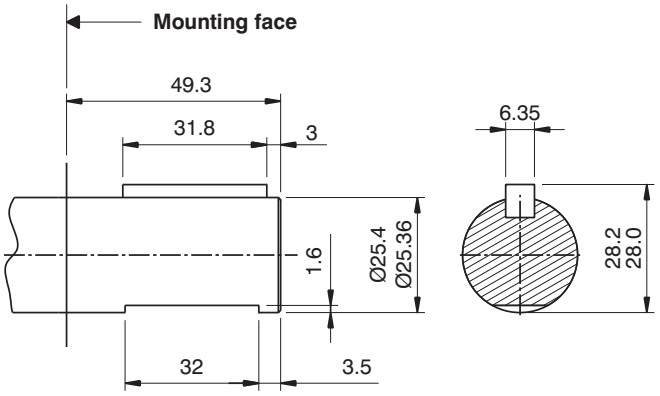
Side ported (SAE Versions)

Shafts:-

- Pump rotation as viewed from the shaft end: Clockwise rotation- outlet on right; Counter clockwise rotation - outlet on left
- Satisfactory drive shaft transmission capacity is indicated with the product of pressure(P) & Displacement (D) is less than or equal to (<) a given constant. The units of P & D are expressed in psi & in³/rev. respectively

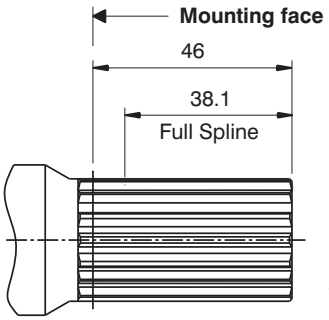
Drive shaft configurations:-

SHAFT CODE 4:-



KEYED SAE 'BB'

SHAFT CODE 5:-



SAE-BB splined shaft
Class 1-J498b
16/32 dp.15 teeth
30° PA flat root side fit.

Drive shaft (Shaft loads) Maximum Input Torque for VGP - CCC series :-

Code	Shaft type	Torque rating	
		Nm	lb-ft
4	KEYED SAE BB	340	250
5	15 TEETH SPLINED SAE BB	500	370