

## EE Series

### Gear Pump Ordering Code

VGP	EE	b	R	Cs <sub>2</sub>	2.5	2.0	6	S1	P2	GB	FB	FB	*	4	B1
Veljan Gear Pump															
Series															
Pump type															
b - Multiple Unit/Double pump															
Rotation															
( Viewed from shaft end )															
R - Clockwise															
L - Counter Clockwise															
Mounting type															
- CS <sub>2</sub> - SAE 'C' 2-bolt - CS <sub>4</sub> - SAE 'C' 4-bolt															
Housing for 'H1' & 'H2'															
(Displacement cc/rev)															
1.25 = 43.50 cc/rev															
1.50 = 58.60															
1.75 = 73.00															
2.00 = 87.40															
2.25 = 101.20															
2.50 = 117.40															
2.75 = 132.20															
3.00 = 146.50															
Shaft end details (Shaft type)															
6 = 1 1/4" KEY SAE C															
7 = 14 SPLINE 1 1/4" SAE C															
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															
H1 - Housing ported															
Port connections-INLET															
See page 135,136															
Ports Position															
B1 - Common Inlet, Dual outlet															
See page 15															
Connecting shaft															
(For Double pump)															
3 - EE															
Rear Section															
(For Tandem/piggyback)															
Port connections OUTLET(P1;P2)															
See page 135,136															

\* :- For Tandem pumps

## 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°C and a viscosity of 38mm<sup>2</sup>/S at 40°C.

Note: Pump output flow is at the maximum rated pressure (See page 15, General pump data)

## VGP - EE Performance Data :

D-Series		Gear Housing Widths							
		1.25"	1.50"	1.75"	2.00"	2.25"	2.50"	2.75"	3.00"
cc/rev		43.50	58.60	73.00	87.40	101.20	117.40	132.20	146.50
Pressure	(bar)	240	240	240	240	240	240	220	200
	(psi)	3500	3500	3500	3500	3250	3000	3250	3000
Max.Speed	(rpm)	2400	2400	2400	2400	2400	2400	2400	2400
Pump Weight	(kg)	24.50	24.60	26.50	27.20	29.0	29.9	31.0	31.80

VGP  
DGP

## Relational chart for Flow rate & Housing width:

	Speed (rpm)	Gear Housing Widths / Flow Rate [ VGP - E Series ]															
		1.25"		1.5"		1.75"		2.0"		2.25"		2.50"		2.75"		3.00"	
		gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
E	1000	11.49	43.5	14.58	58.6	19.28	73.0	23.09	87.4	26.73	101.2	31.01	117.4	34.92	132.2	38.70	146.5
	1500	16.71	63.25	22.56	85.40	28.34	107.3	34.10	129.1	39.49	149.5	46.02	174.2	51.73	195.8	57.46	217.5
	2000	22.40	84.8	30.43	115.20	38.10	143.8	45.49	172.2	52.89	200.2	61.34	232.2	69.24	262.1	76.93	291.2
	2400	26.97	102.1	36.51	138.20	45.46	172.1	54.82	207.5	63.54	240.5	73.76	279.2	83.17	314.8	92.02	348.3

## Relational chart for Housing width & Input Power for single section only :-

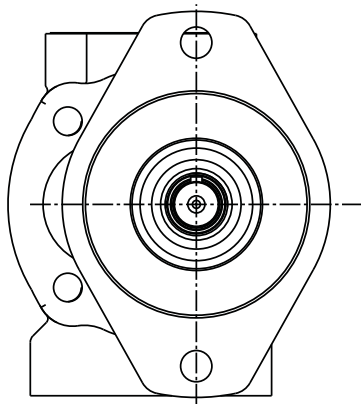
	Speed (rpm)	Gear Housing Widths / Input power [ VGP - E Series ]															
		1.25"		1.5"		1.75"		2.0"		2.25"		2.50"		2.75"		3.00"	
		HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW
E	1000	25	19	35	26	43	32	51	38	58	43	67	50	70	52	73	54
	1500	37	28	51	38	63	47	75	56	86	64	99	74	102	76	106	79
	2000	51	38	67	50	83	62	98	73	114	85	131	98	135	101	141	105
	2400	62	46	80	60	99	74	119	89	139	104	160	119	165	123	172	128

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

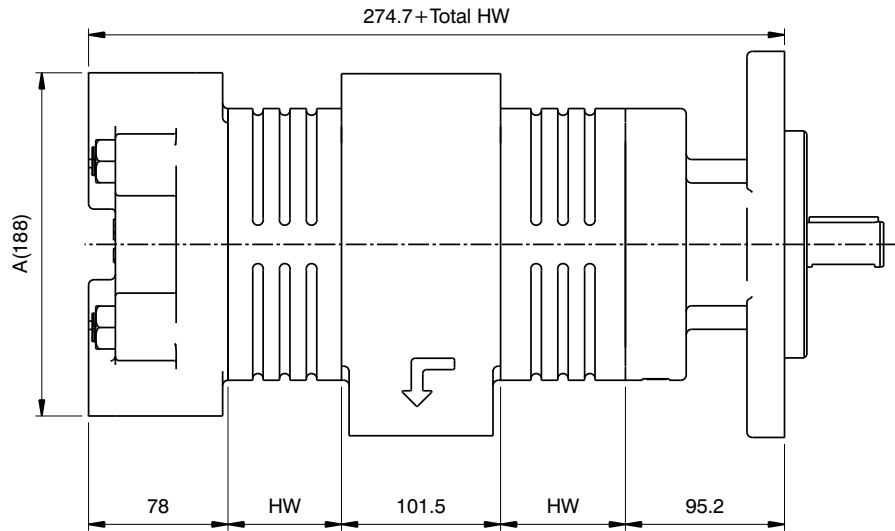
## Double Pump Unit Dimensions of VGP - EE :-

COMMON INLET - B1 (One Inlet , Two Outlets) - VGP - EE

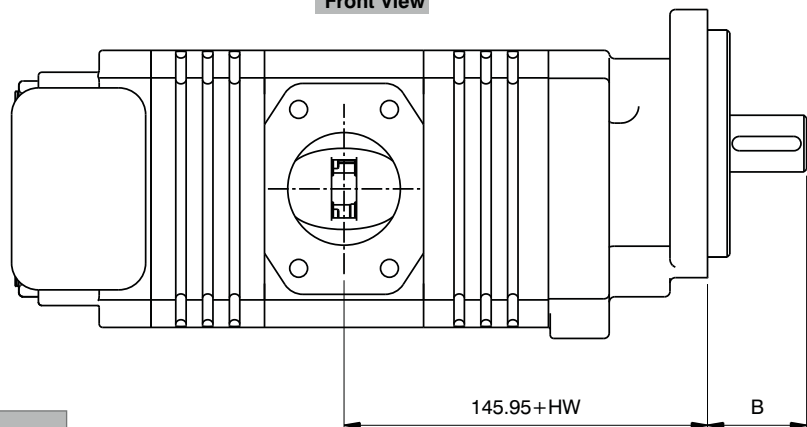
VGP  
DGP



Side View



Front View



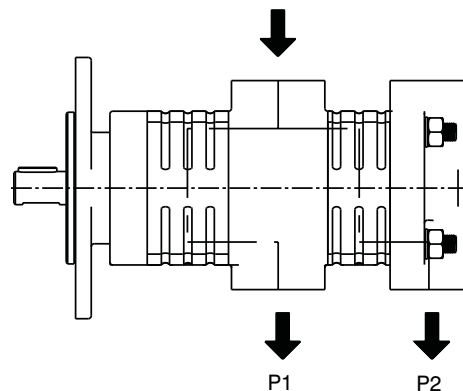
Top View

VGP - EE Series		
Housing Width Inches (HW)	Displacement (cc/rev)	
	P1	P2
1.25"	43.50	43.50
1.50"	58.60	58.60
1.75"	73.00	73.00
2.00"	87.40	87.40
2.25"	101.20	101.20
2.50"	117.40	117.40
2.75"	132.20	132.20
3.00"	146.50	146.50

A - Dimension varies with the type of ports.

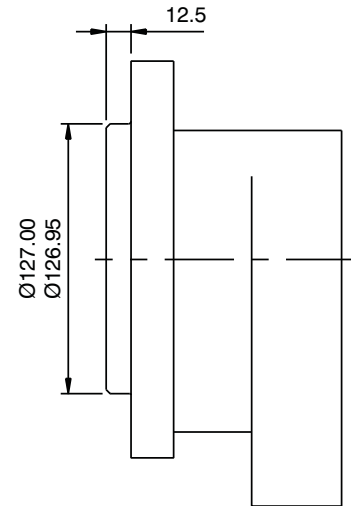
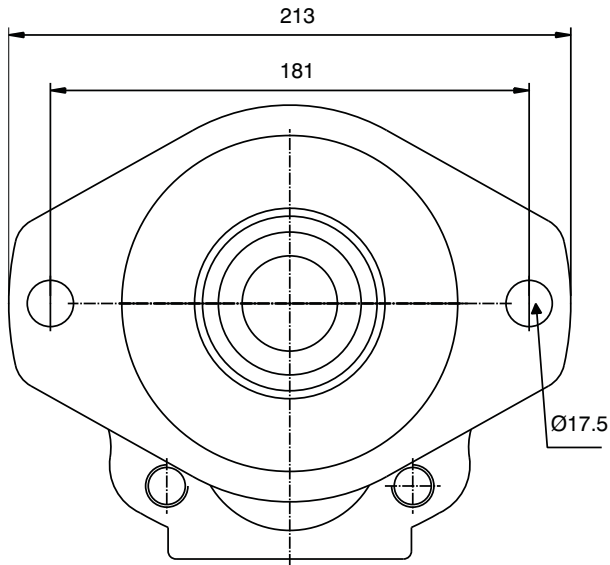
B - Dimension varies with the type of drive shaft ends.

HW - Housing width

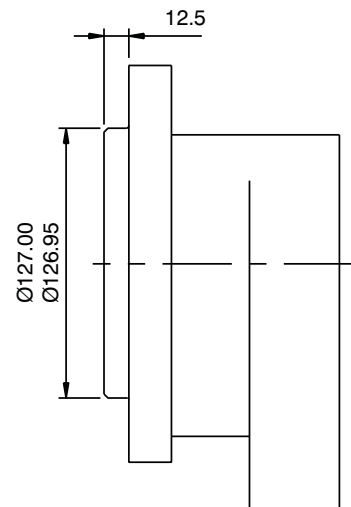
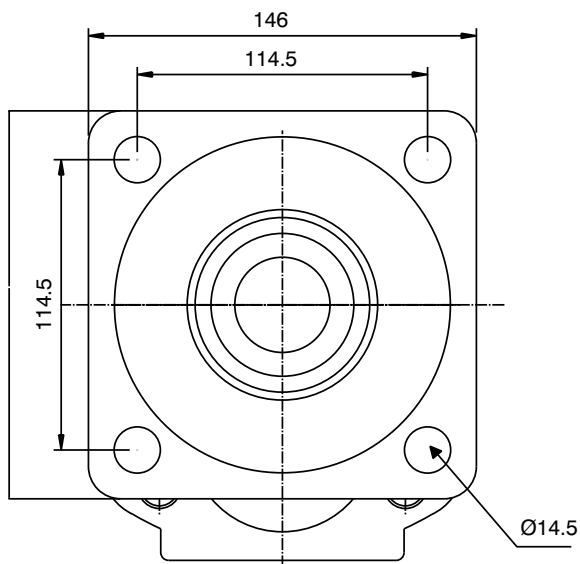


## FLANGE DETAILS - 'EE' Series:-

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



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



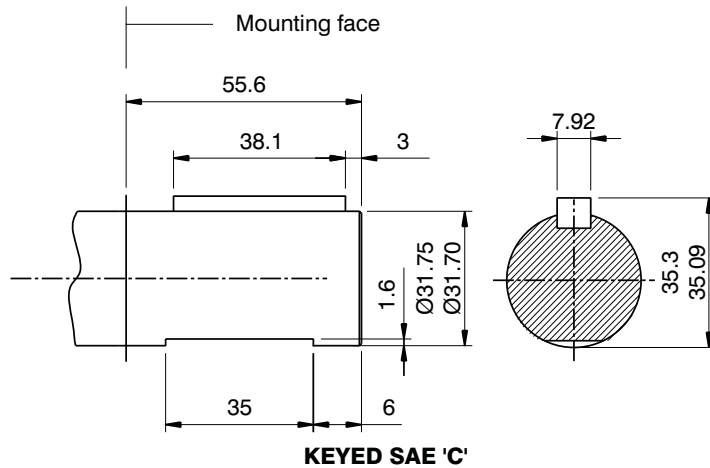
## Unit dimensions of VGP-EE Side ported (SAE Versions)

### Shafts :

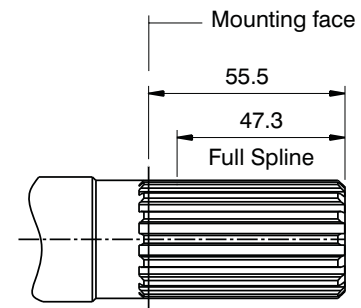
- Pump rotation as viewed from the shaft end: Clockwise rotation - outlet on right; Counter clockwise rotation - outlet on left
- Satisfactory drive shaft transmission capacity is indicated with the product of pressure(P) & Displacement (D) is less than or equal to (<) a given constant. The units of P & D are expressed in psi & in<sup>3</sup>/rev. respectively

### Drive shaft configurations :

#### SHAFT CODE 6:-



#### SHAFT CODE 7:-



SAE-C splined shaft  
12/24 dp.14 teeth  
30° PA flat root side fit.

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

Code	Shaft type	Torque rating	
		Nm	lb-ft
6	KEYED SAE C	675	500
7	14 TEETH SPLINED SAE C	958	705