

EEE Series

Gear Pump Ordering Code

VGP EEE b R CS₄ 1.5 1.0 1.0 5 S1 P2 GB FB FB FB 3 B1

Veljan Gear Pump

Series

Pump type

b - Multiple Unit/Triple pump

Rotation

(Viewed from shaft end)

R - Clockwise

L - Counter Clockwise

Mounting type



CS₂ - SAE 'C' 2-bolt



CS₄ - SAE 'C' 4-bolt

Housing for 'H1', 'H2' & 'H3'

(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

H1 H2 H3

P1 P2 P3

Ports Position

B3-Three Inlets,
Three Outlets,

B2-Two Inlets,
Two Outlets,

Connecting shaft
(For Multiple pump)
4 - EE

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

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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 38mm²/S at 40°C.

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

VGP - EEE 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
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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

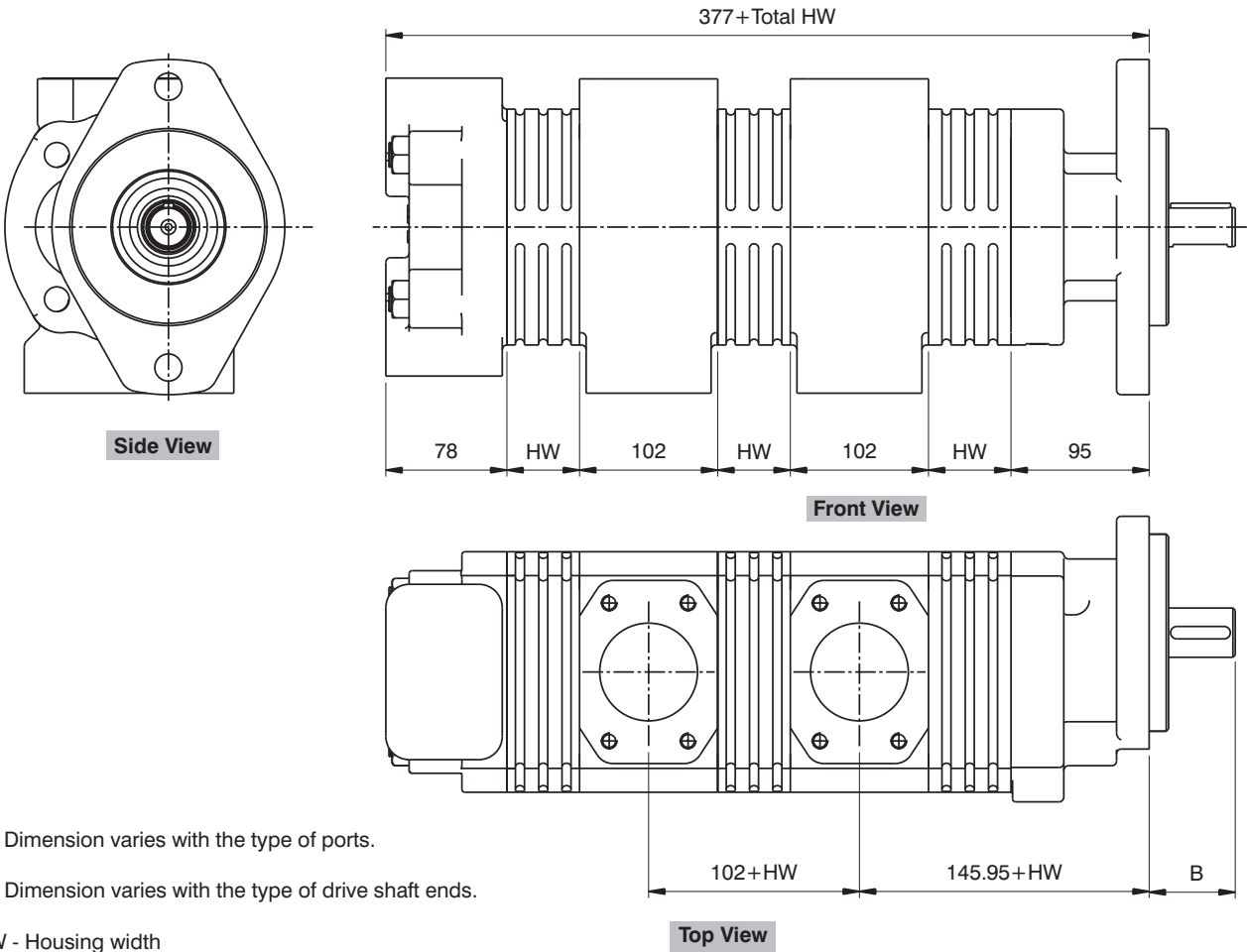
Relational chart for Housing width & Input Power for single section :-

	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.

Triple Pump Unit Dimensions of VGP - DDD :-

VGP
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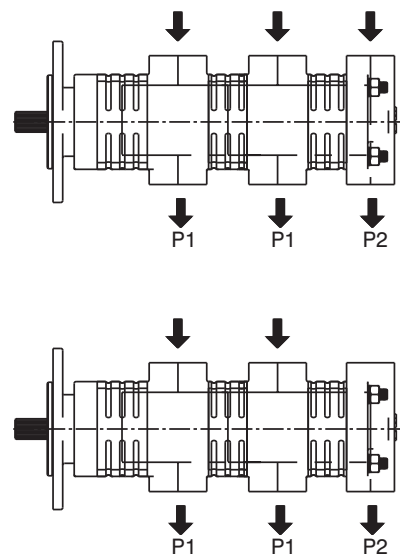


A - Dimension varies with the type of ports.

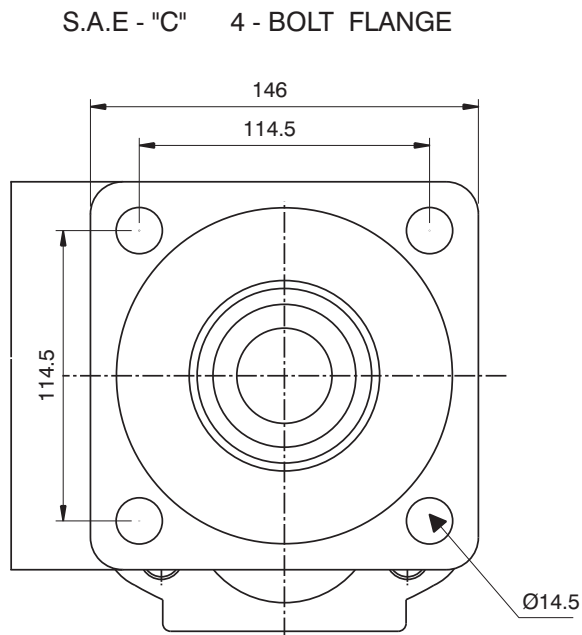
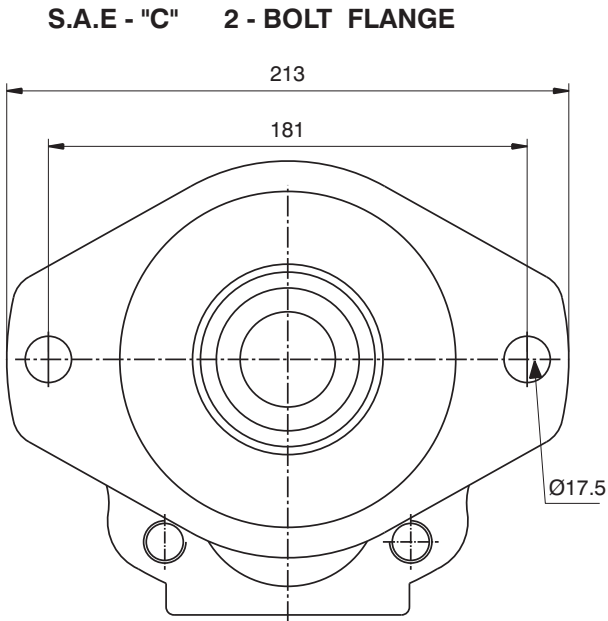
B - Dimension varies with the type of drive shaft ends.

HW - Housing width

VGP-EEE Series			
Housing Width Inches (HW)	Displacement (cc/rev)		
	P1	P2	P3
1.25"	43.50	43.50	43.50
1.50"	58.60	58.60	58.60
1.75"	73.00	73.00	73.00
2.00"	87.40	87.40	87.40
2.25"	101.20	101.20	101.20
2.50"	117.40	117.40	117.40
2.75"	132.20	132.20	132.20
3.00"	146.50	146.50	146.50



FLANGE DETAILS - 'EEE' Series:-



VGP
TGP

Unit dimensions of VGP-EEE

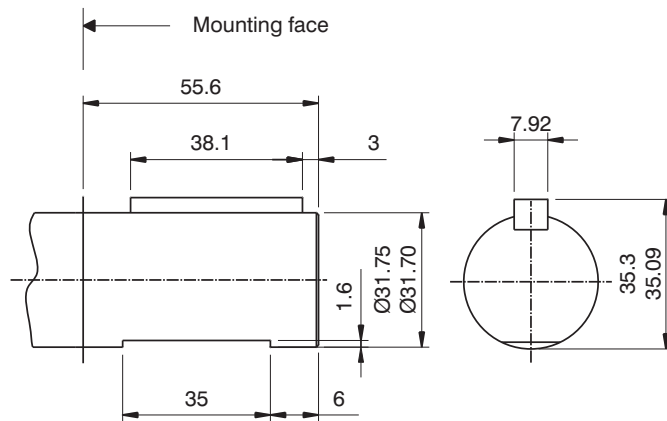
Side ported (SAE Versions)

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

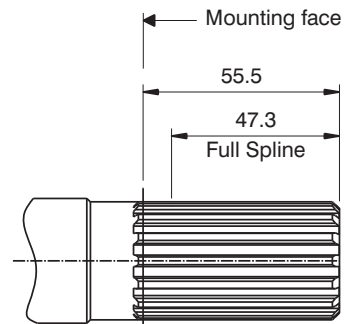
Drive shaft configurations :

SHAFT CODE 6:-



KEYED SAE 'C'

SHAFT CODE 7:-



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

SPLINED SHAFT SAE 'C'

Drive shaft (Shaft loads)

Maximum Input Torque for VGP - EEE series :-

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