

DD Series

Gear Pump Ordering Code

VGP	DD	b	R	CS ₂	2.0	2.5	5	S1	P2	GB	FB	FB	*	3	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 ₂ - SAE 'C' 2-bolt CS ₄ - SAE 'C' 4-bolt															
Housing for 'H1' & 'H2' (Displacement cc/rev)															
1.00 = 20.60 cc/rev															
1.25 = 31.00															
1.50 = 41.50															
1.75 = 52.00															
2.00 = 62.40															
2.25 = 72.50															
2.50 = 83.40															
2.75 = 93.60															
3.00 = 104.2															
Shaft end details (Shaft type)															
3 = 13 SPLINE 7/8" SAE B															
4 = 1" KEY SAE BB															
5 = 15 SPLINE 1" SAE BB															
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															

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Ports Position
B1 - Common Inlet, Dual outlet
See page 14

Connecting shaft
(For Double pump)
3 - DD

Rear Section
(For Tandem / piggyback)
VGP - C

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 38mm²/S at 40°C.

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

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VGP - D Performance Data :

D-Series		Gear Housing Widths								
		1.00"	1.25"	1.50"	1.75"	2.00"	2.25"	2.50"	2.75"	3.00"
cc/rev		20.6	31.0	41.50	52.0	62.40	72.5	83.40	93.6	104.2
Pressure	(bar)	240	240	240	240	240	220	200	190	170
	(psi)	3500	3500	3500	3500	3500	3250	3000	2750	2500
Max.Speed	(rpm)	2400	2400	2400	2400	2400	2400	2400	2400	2400
Pump Weight	(kg)	23.00	23.10	23.10	24.20	24.90	25.90	26.20	26.90	27.80

Relational chart for Flow rate & Housing width:

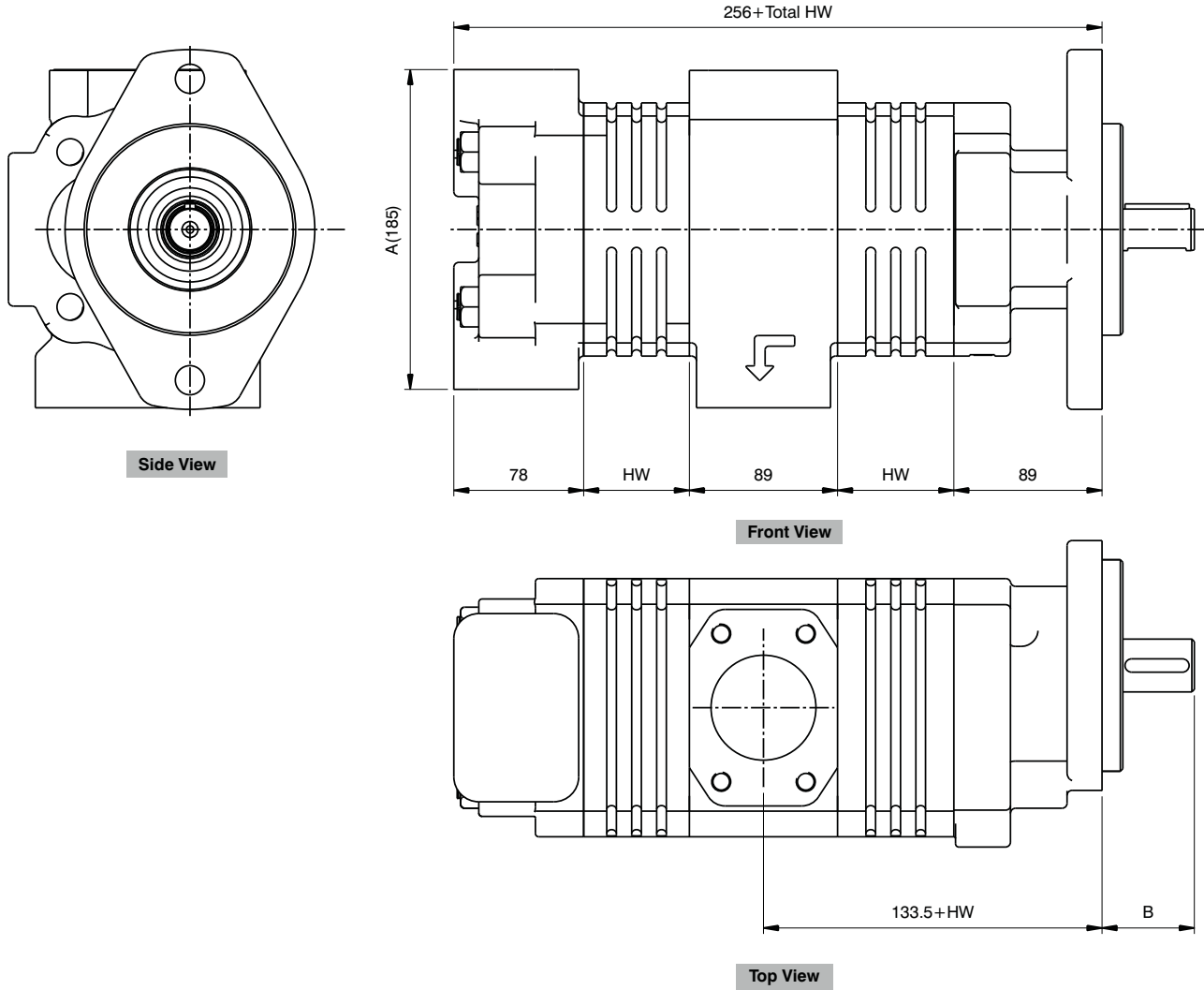
	Speed (rpm)	Gear Housing Widths / Flow Rate [VGP - D Series]																	
		1.00"		1.25"		1.5"		1.75"		2.0"		2.25"		2.50"		2.75"		3.00"	
		gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
D	1000	5.41	20.50	7.97	30.20	10.59	40.10	13.42	50.80	16.30	62.0	19.15	72.50	21.80	82.80	24.72	93.60	27.42	103.80
	1500	7.52	28.50	11.38	43.10	15.36	58.15	19.59	74.15	24.17	91.52	28.20	106.75	32.25	122.10	36.56	138.41	40.34	152.71
	2000	10.35	39.2	15.42	58.40	20.64	78.15	26.31	99.61	32.23	122.0	37.91	143.50	43.14	163.30	48.90	185.12	54.31	205.60
	2400	12.47	47.20	18.52	70.12	24.87	94.14	31.65	119.82	38.67	146.4	45.39	171.81	51.94	196.62	58.78	222.51	65.28	247.12

Relational chart for Housing width & Input Power :

	Speed (rpm)	Gear Housing Widths / Input power [VGP - D 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
D	1000	19	14	24	18	30	22	36	27	40	30	42	31	44	33	47	35
	1500	27	20	35	26	43	32	54	40	58	43	61	45	63	47	66	49
	2000	35	26	46	34	58	43	71	53	75	56	78	58	83	62	86	64
	2400	40	30	54	40	68	51	84	63	90	67	93	69	98	73	101	75

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 - DD :-

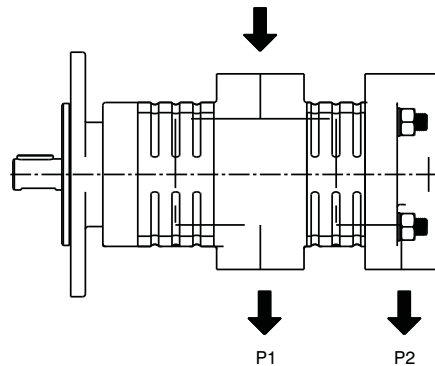


VGP-DD Series		
Housing Width Inches (HW)	Displacement (cc/rev)	
	P1	P2
1.00"	20.60	20.60
1.25"	31.00	31.00
1.50"	41.50	41.50
1.75"	52.00	52.00
2.00"	62.40	62.40
2.25"	69.80	69.80
2.50"	83.40	83.40
2.75"	93.60	93.60
3.00"	104.2	104.2

A - Dimension varies with the type of ports.

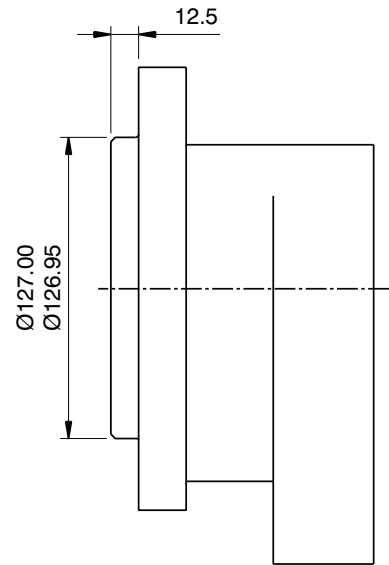
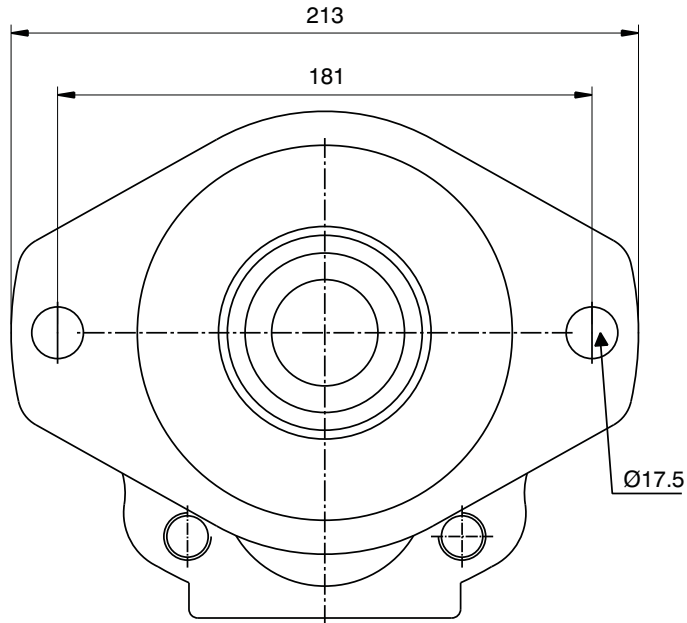
B - Dimension varies with the type of drive shaft ends.

HW - Housing width

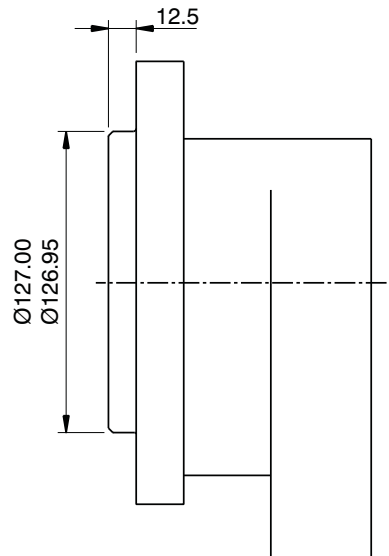
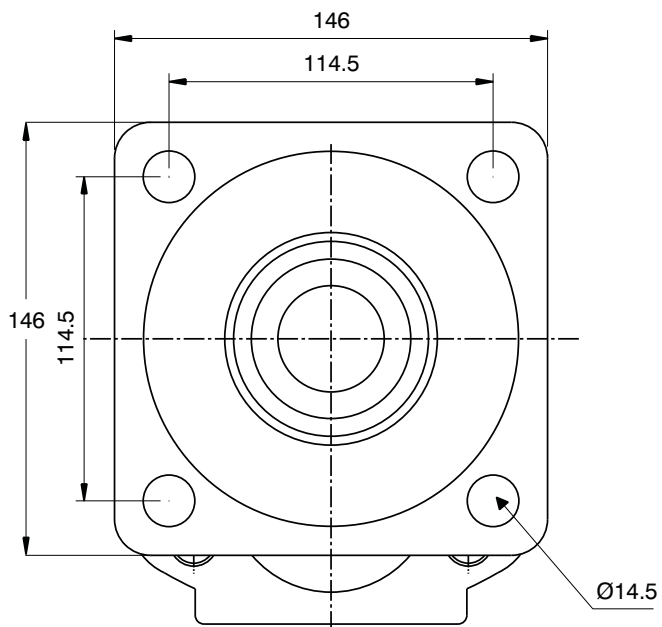


FLANGE DETAILS - 'DD' Series:-

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



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



Unit dimensions of VGP-DD Side ported (SAE Versions)

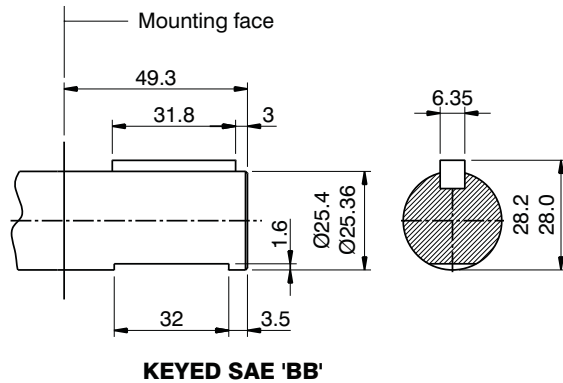
Shafts :

- 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

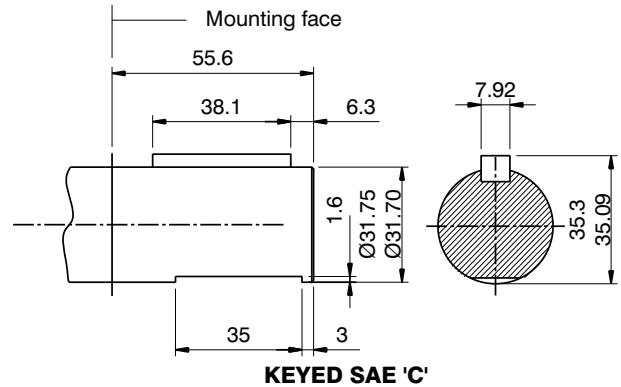
Drive shaft configurations :

VGP
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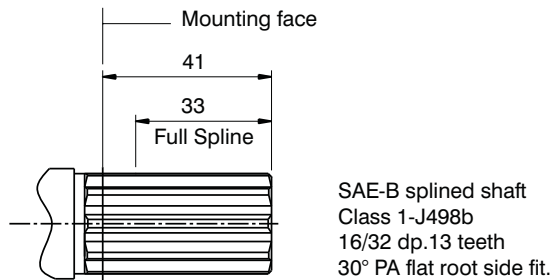
SHAFT CODE 4:



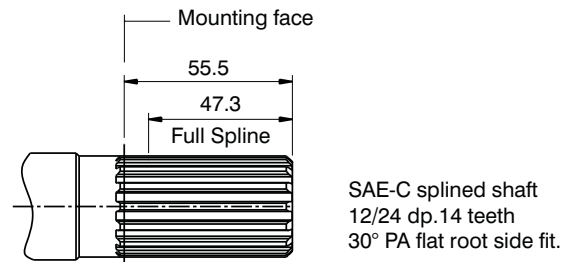
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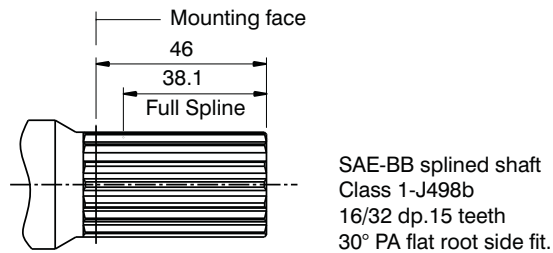
SHAFT CODE 3:



SHAFT CODE 7:



SHAFT CODE 5:-



Drive shaft (Shaft loads)

Maximum Input Torque for VGP - DD series :-

Code	Shaft type	Torque rating	
		Nm	lb-ft
3	13 TEETH SPLINE SAE B	330	240
4	KEYED SAE BB	340	250
5	15 TEETH SPLINED SAE BB	500	370
6	KEYED SAE C	675	500
7	14 TEETH SPLINED SAE C	958	705