

## DC Series

### Gear Pump Ordering Code

VGP	DC	C	R	CS <sub>2</sub>	2.5	2.0	6	S1	P2	HU	GB	FB	FB	C	7	B2
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Veljan Gear Pump

Series

Pump type

C-Piggy back / Tandem

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)

#### VGP-D Series (H1)

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

#### VGP-C Series (H2)

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

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

Port connections

INLET-I(S1) ;INLET - II(S2)

See page 135,136

Ports Position

B2 - Seperate stages

Two Inlets, Two outlets

See page 15

Connecting shaft

(For Multiple pump)

7 - DC

Rear Section

(For Tandem/piggyback)

VGP-C

Port connections

OUTLET(P1;P2)

See page 135,136

VGP  
DGP

## 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 - 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

VGP  
DGP

## Relational chart for Flow rate & Housing width:

D	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
	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

## VGP - C 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

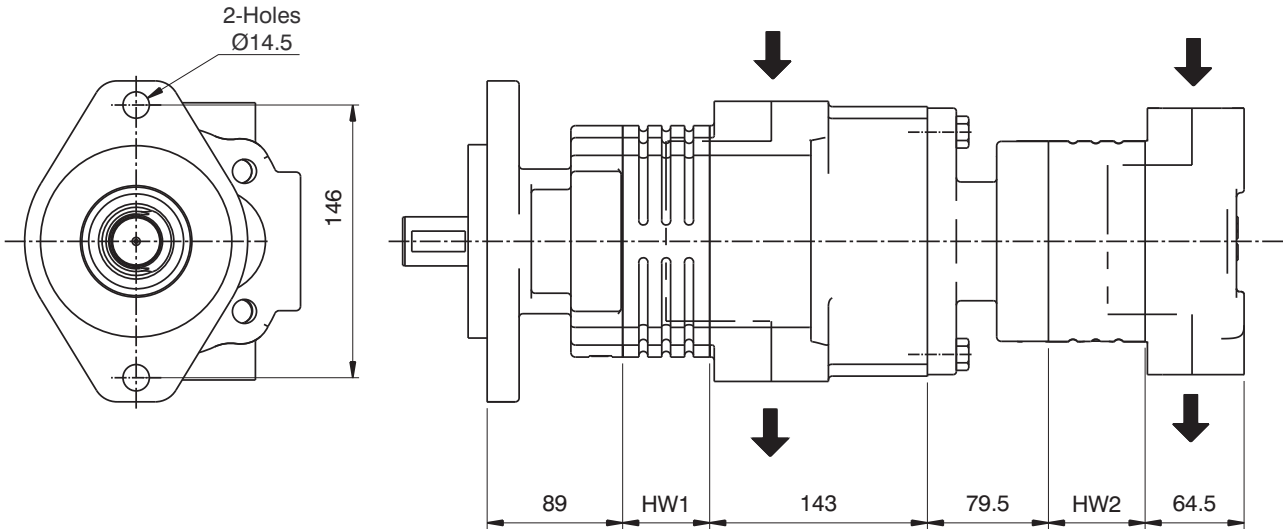
## Relational chart for Housing width & Input Power :

C	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
	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.

## SEPERATED STAGES - B2 (Two Inlets , Two Outlets) - VGP - DC Unit dimensions of Tandem/piggy backpump VGP-DC

VGP  
DGP



VGP-DC Series			
VGP - D Series		VGP - C Series	
Housing Width Inches (HW1)	Displacement (cc/rev)	Housing Width Inches (HW2)	Displacement (cc/rev)
	Outlet-I		Outlet-II
1.00"	20.60	1.00"	15.90
1.25"	31.00	1.25"	24.00
1.50"	41.50	1.50"	32.00
1.75"	52.00	1.75"	40.10
2.00"	62.40	2.00"	48.10
2.25"	69.80	2.25"	56.30
2.50"	83.40	2.50"	64.40
2.75"	93.60		
3.00"	104.2		

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

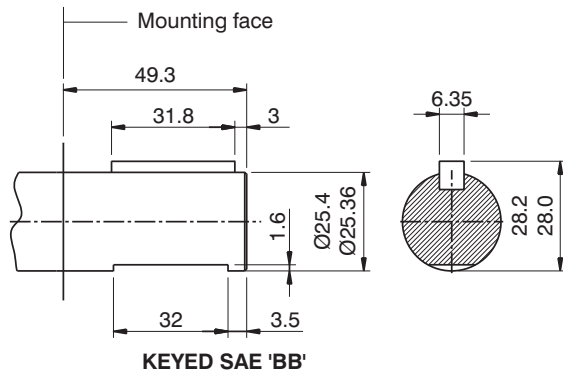
### Shafts :

- 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

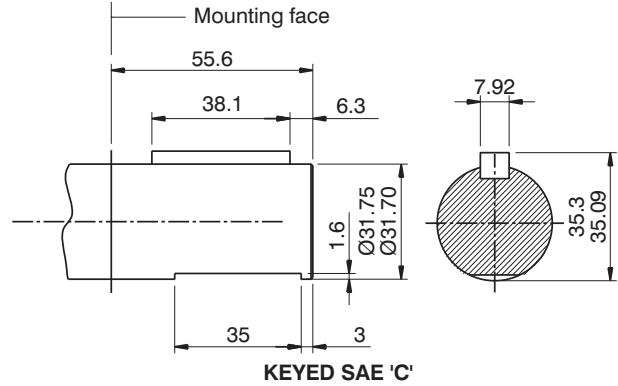
### Drive shaft configurations :

VGP  
DGP

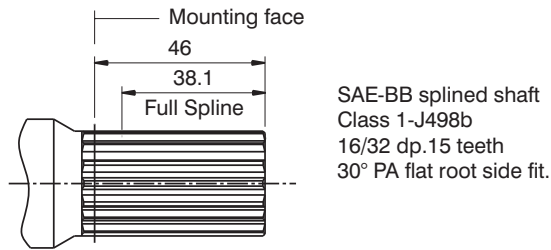
#### SHAFT CODE 4:



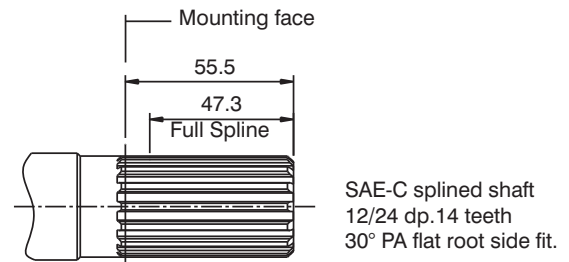
#### SHAFT CODE 6:



#### SHAFT CODE 5:



#### SHAFT CODE 7:



### Drive shaft ( Shaft loads)

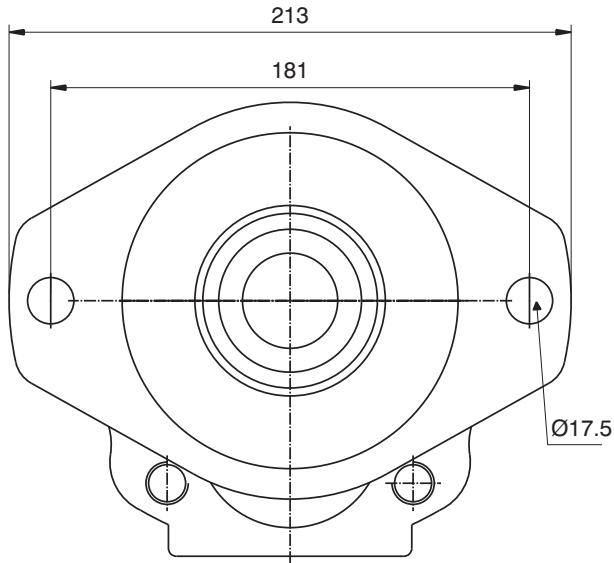
#### Maximum Input Torque for VGP - DC series :-

Code	Shaft type	Torque rating	
		Nm	lb-ft
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

FLANGE DETAILS - 'DC' Series:-

VGP  
DGP

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



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

