

Features

- Fixed displacement vane pumps provide higher efficiency than gear pumps. The higher efficiency is preferred in larger displacements to reduce heat generated.
- The design provides good cost per horsepower versus other pump designs
- Hydraulic balancing provides stable performance and longer life due to less pressure from the vanes to the stator.
- Twelve vanes provide low amplitude pulsations resulting in lower noise and longer system life.
- Floating side plate will self compensate the end to face clearance as pressure changes to maintain high volumetric clearance.



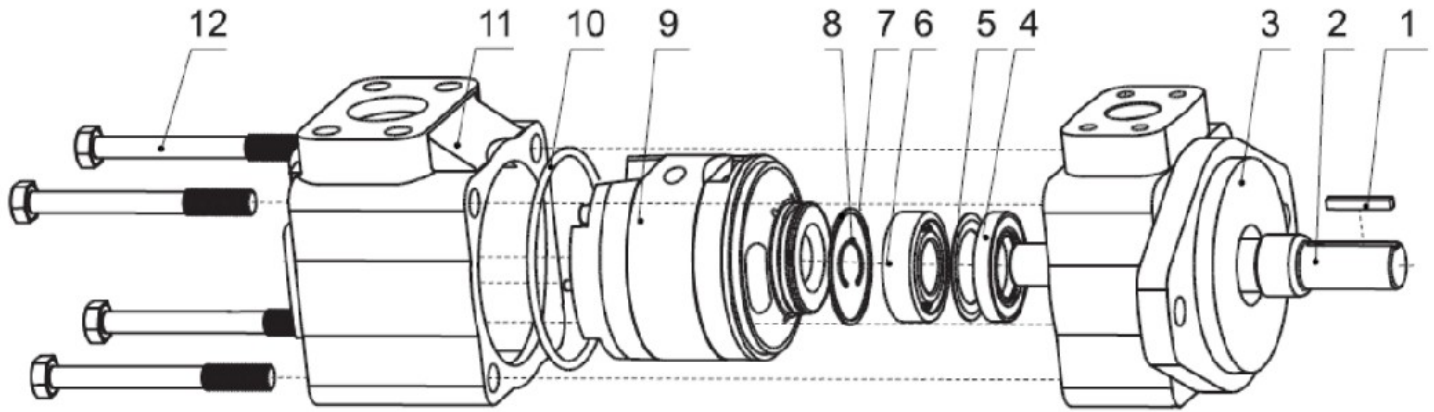
Ordering Details

P	Pump																														
F	Fixed																														
V	Vane																														
55-	CC, Centimeters ³ /rev.:																														
<table border="1"> <thead> <tr> <th>Code, cc/rev</th> <th>Frame Size</th> </tr> </thead> <tbody> <tr> <td>32, 38, 43, 47, 54, 60, 67, 79</td> <td>1</td> </tr> <tr> <td>95, 101, 109, 119</td> <td>2</td> </tr> <tr> <td>134, 143, 159, 181, 189, 210, 237</td> <td>3</td> </tr> </tbody> </table>		Code, cc/rev	Frame Size	32, 38, 43, 47, 54, 60, 67, 79	1	95, 101, 109, 119	2	134, 143, 159, 181, 189, 210, 237	3																						
Code, cc/rev	Frame Size																														
32, 38, 43, 47, 54, 60, 67, 79	1																														
95, 101, 109, 119	2																														
134, 143, 159, 181, 189, 210, 237	3																														
K.8-	Shaft Style:																														
<table border="1"> <thead> <tr> <th>Code</th> <th>Shaft Dia., in.</th> <th>Key Width, in.</th> <th>Frame Size</th> </tr> </thead> <tbody> <tr> <td>K.8S</td> <td>0.875</td> <td>0.187</td> <td>1</td> </tr> <tr> <td>K1</td> <td>1.0</td> <td>0.25</td> <td>1</td> </tr> <tr> <td>K1.25</td> <td>1.25</td> <td>0.312</td> <td>2, 3</td> </tr> <tr> <td>K1.5</td> <td>1.5</td> <td>0.375</td> <td>3</td> </tr> </tbody> </table>		Code	Shaft Dia., in.	Key Width, in.	Frame Size	K.8S	0.875	0.187	1	K1	1.0	0.25	1	K1.25	1.25	0.312	2, 3	K1.5	1.5	0.375	3										
Code	Shaft Dia., in.	Key Width, in.	Frame Size																												
K.8S	0.875	0.187	1																												
K1	1.0	0.25	1																												
K1.25	1.25	0.312	2, 3																												
K1.5	1.5	0.375	3																												
2B-	Mounting Flange:																														
<table border="1"> <thead> <tr> <th>Code</th> <th>Flange</th> <th>Frame Size</th> </tr> </thead> <tbody> <tr> <td>2B</td> <td>SAE B, 2-BOLT</td> <td>1</td> </tr> <tr> <td>2C</td> <td>SAE C, 2-BOLT</td> <td>2, 3</td> </tr> </tbody> </table>		Code	Flange	Frame Size	2B	SAE B, 2-BOLT	1	2C	SAE C, 2-BOLT	2, 3																					
Code	Flange	Frame Size																													
2B	SAE B, 2-BOLT	1																													
2C	SAE C, 2-BOLT	2, 3																													
F1	Pressure Port:																														
F1.5	Suction Port:																														
<table border="1"> <thead> <tr> <th colspan="4">4-bolt Flange, Code 61</th> </tr> <tr> <th rowspan="2">Code</th> <th rowspan="2">Port Dia., inches</th> <th colspan="2">Frame Size</th> </tr> <tr> <th>Pressure Port</th> <th>Suction Port</th> </tr> </thead> <tbody> <tr> <td>F1</td> <td>1</td> <td>1</td> <td></td> </tr> <tr> <td>F1.25</td> <td>1 1/4</td> <td>2</td> <td></td> </tr> <tr> <td>F1.5</td> <td>1 1/2</td> <td>3</td> <td>1</td> </tr> <tr> <td>F2</td> <td>2</td> <td></td> <td>2</td> </tr> <tr> <td>F3</td> <td>3</td> <td></td> <td>3</td> </tr> </tbody> </table>		4-bolt Flange, Code 61				Code	Port Dia., inches	Frame Size		Pressure Port	Suction Port	F1	1	1		F1.25	1 1/4	2		F1.5	1 1/2	3	1	F2	2		2	F3	3		3
4-bolt Flange, Code 61																															
Code	Port Dia., inches	Frame Size																													
		Pressure Port	Suction Port																												
F1	1	1																													
F1.25	1 1/4	2																													
F1.5	1 1/2	3	1																												
F2	2		2																												
F3	3		3																												
0-	Ports:																														
<table border="1"> <thead> <tr> <th>Code</th> <th>Port Location</th> <th>Code</th> <th>Port Location</th> </tr> </thead> <tbody> <tr> <td>0 (Standard)</td> <td></td> <td>180</td> <td></td> </tr> <tr> <td>90</td> <td></td> <td>270</td> <td></td> </tr> </tbody> </table>		Code	Port Location	Code	Port Location	0 (Standard)		180		90		270																			
Code	Port Location	Code	Port Location																												
0 (Standard)		180																													
90		270																													
R-	Shaft rotation when looking at the shaft: R= Right Hand (CW) , L=Left Hand (CCW)																														
11	Series																														

Example Part Number: PFV55-K.8-2B-F1F1.50-R-11

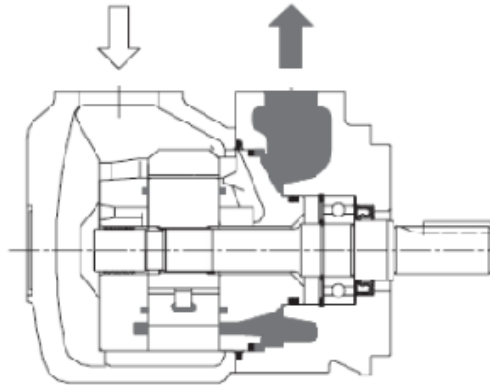
Section 1 – Technical Specifications

Pump Construction:



Item	Description	Qty.
1	Parallel Key	1
2	Shaft	1
3	Front Cover	1
4	Shaft Seal	1
5	Gasket	1
6	Ball Bearing	1

Item	Description	Qty.
7	Retaining Ring	1
8	Retaining snap ring	1
9	Cartridge vane set (replaceable)	1
10	O-ring	1
11	Rear Cover	1
12	Hexagon bolt	4

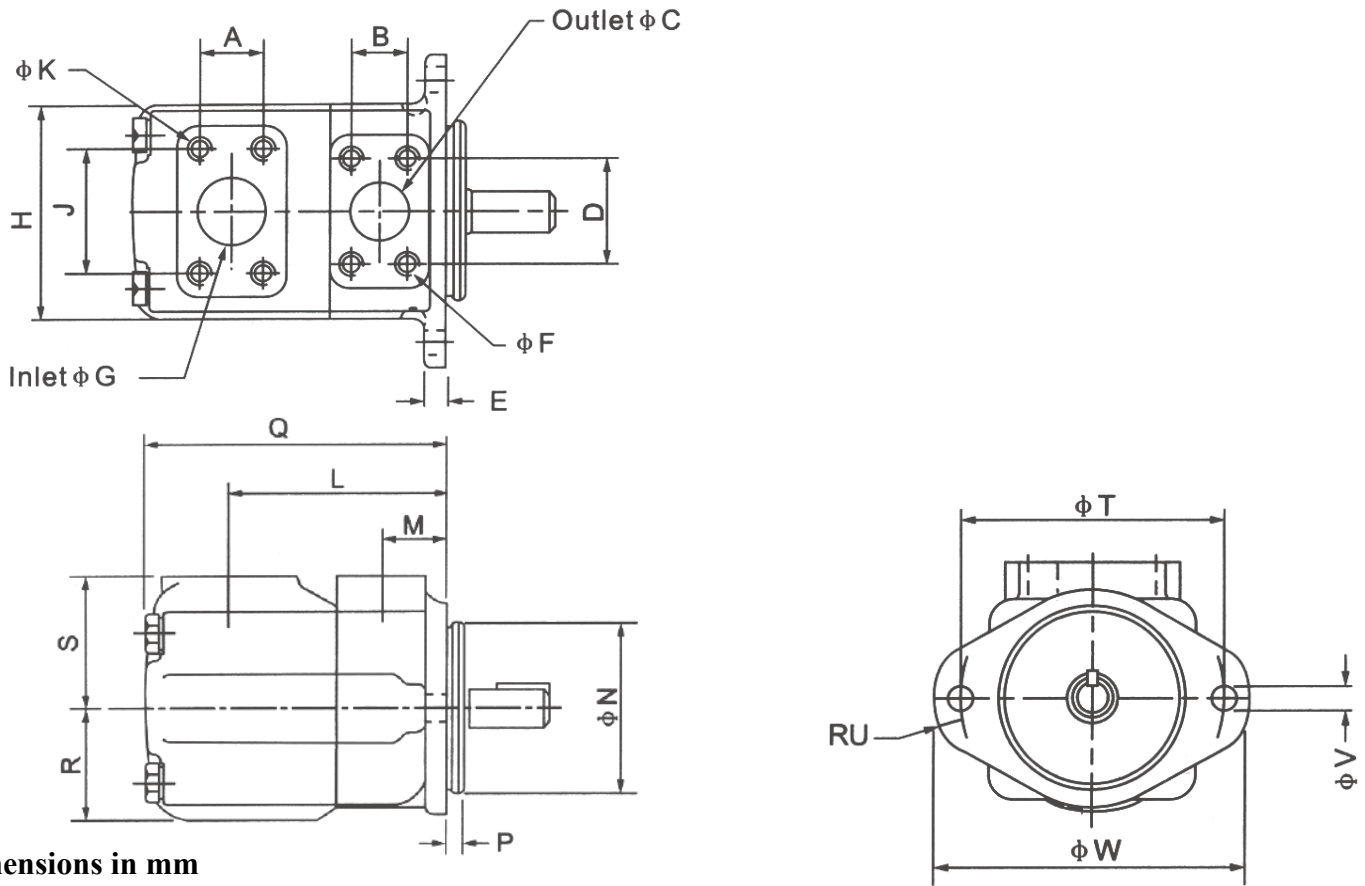


Technical Specifications:

Frame	cc/rev	Max. Operating Pressure, psi (bar)	Max. rpm	Min. rpm	Flow at 1200rpm and 7bar/100psi, gpm (lpm)	Approximate flow loss per additional 100psi pressure increase, gpm per 100psi (lpm per 10bar)	Weight, Kg (lbs.)	Fluid Recommendation
1	32	3000 (210)	2700	600	10.1 (38.4)	.10 (.53)	15.0 (33.0)	Mineral Based Oil
	38	3000 (210)	2700	600	12.0 (45.6)	.10 (.53)		
	43	3000 (210)	2700	600	13.6 (51.6)	.10 (.53)		
	47	3000 (210)	2500	600	14.8 (56.4)	.10 (.53)		
	54	3000 (210)	2500	600	17.1 (64.8)	.10 (.53)		
	60	3000 (210)	2500	600	18.9 (72.0)	.10 (.53)		
	67	3000 (210)	2500	600	21.2 (80.4)	.10 (.53)		
2	79	3000 (210)	2500	600	24.9 (94.8)	.10 (.53)	24.0 (52.8)	
	95	3000 (207)	2500	600	30.0 (114.0)	.19 (1.07)		
	101	3000 (207)	2500	600	31.9 (121.2)	.19 (1.07)		
	109	3000 (207)	2400	600	34.4 (130.8)	.19 (1.07)		
3	119	3000 (207)	2400	600	37.6 (142.8)	.22 (1.222)	37.0 (81.4)	
	134	2500 (175)	2400	600	42.3 (160.8)	.26 (1.44)		
	143	2500 (175)	2200	600	45.2 (171.6)	.26 (1.44)		
	159	2500 (175)	2200	600	50.2 (190.8)	.26 (1.44)		
	181	2500 (175)	2200	600	57.2 (217.2)	.26 (1.44)		
	189	2500 (175)	2200	600	59.7 (226.8)	.31 (1.75)		
	210	2500 (175)	2200	600	66.3 (252.0)	.31 (1.75)		
237	2000 (140)	2200	600	74.8 (284.4)	.31 (1.75)			

Section 2 – Dimensional Data

Dimensions Frame 1, 2 and

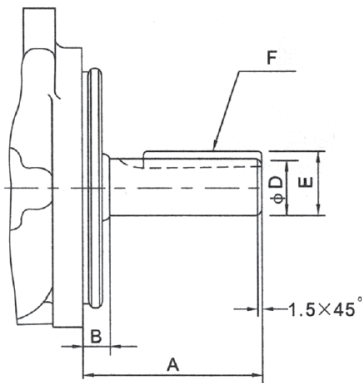


Dimensions in mm

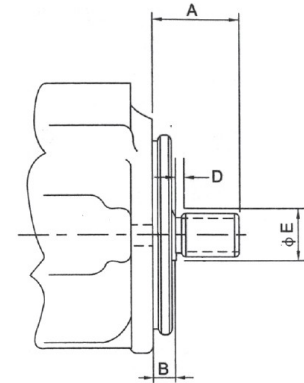
Frame	A	B	ϕ C	D	E	ϕ G	H	J	L	M	N	P	Q	R
1	35.7	26.2	25.4	52.4	12.7	38.1	118	69.9	121	38.1	101.60/101.55	9.53	162.1	63.5
2	42.9	30.2	31.8	58.7	16	50.8	140	77.8	125.5	38.1	127.00/126.95	9.53	185	69.9
3	61.9	35.7	38.1	69.9	16	76.2	159	106.4	153	43	127.00/126.95	12.7	216	82.6

Frame	S	T	RU	ϕ V	W	ϕ X	ϕ F x Thread and depth (x4)	ϕ K x Thread and depth (x4)
1	76.2	146	14	14.2	175	121	3/8-16UNC-2B x 19.1	1/2-13UNC-2B x 23.8
2	82.6	181	16	17.5	213	148	7/16-14UNC-2B x 22.3	1/2-13UNC-2B x 22.3
3	93.7	181	16	17.5	213	148	1/2-13UNC-2B x 23.8	5/8-11UNC-2B x 25.4

Keyed Shaft:



Spline Shaft:



Code	Frame	A	B	ϕ D	E	F Key Width x Length
K.8S	1	59	11.1	22.23/22.20	24.5/24.4	4.76 x 32
K1	1	78	11.1	25.37/25.35	28.3/28.1	6.36 x 50.8
K1.25	2	73.2	11.1	31.75/31.70	35.36/35.10	7.94 x 38.1
	3	62	14.22	31.75/31.70	35.36/35.10	7.94 x 38.1
K1.5	3	87.4	14.22	38.07/38.05	42.4/42.1	9.54 x 50.8

Code	Frame	A	B	D	ϕ E	Spline Details
13T.8	1	44.5	11.1	3.9	27.8	13T 16/32
14T	2	58.7	11.1	6.35	35.1	14T 12/24
	3	61.9	14.3	9.7	39.6	14T 12/24