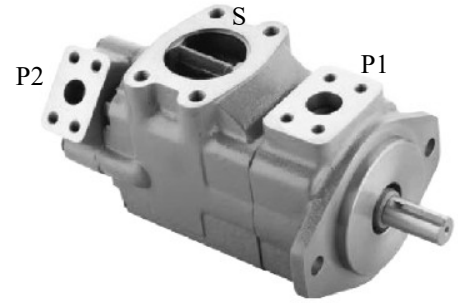


Features

- Double output flow with single suction port.
- Fixed Displacement Vane Pump 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.

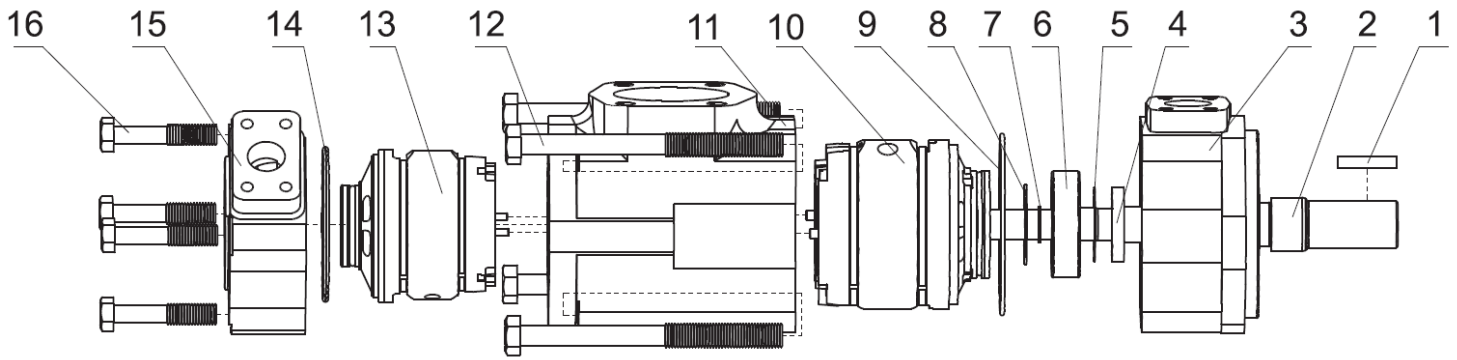


Ordering Details

P	Pump																																																																																																														
F	Fixed																																																																																																														
V	Vane																																																																																																														
113/46-	<p>CC, Centimeters³/rev. P1/P2:</p> <table border="1"> <thead> <tr> <th colspan="2">Pressure Port P1</th> <th colspan="2">Pressure Port P2</th> </tr> <tr> <th>Code, cc/rev</th> <th>Frame</th> <th>Code, cc/rev</th> <th>Frame</th> </tr> </thead> <tbody> <tr> <td>40, 45, 55, 67</td> <td>1</td> <td>18, 27, 36, 40, 46</td> <td>1</td> </tr> <tr> <td>82, 98, 113, 122</td> <td>2</td> <td>18, 27, 36, 40, 46</td> <td>2</td> </tr> <tr> <td>82, 98, 113, 122</td> <td>3</td> <td>40, 45, 55, 68</td> <td>3</td> </tr> <tr> <td>139, 162, 193</td> <td>4</td> <td>18, 27, 36, 40, 46</td> <td>4</td> </tr> <tr> <td>139, 162, 193</td> <td>5</td> <td>40, 45, 55, 68</td> <td>5</td> </tr> <tr> <td>139, 162, 193</td> <td>6</td> <td>82, 98, 113, 122</td> <td>6</td> </tr> </tbody> </table>	Pressure Port P1		Pressure Port P2		Code, cc/rev	Frame	Code, cc/rev	Frame	40, 45, 55, 67	1	18, 27, 36, 40, 46	1	82, 98, 113, 122	2	18, 27, 36, 40, 46	2	82, 98, 113, 122	3	40, 45, 55, 68	3	139, 162, 193	4	18, 27, 36, 40, 46	4	139, 162, 193	5	40, 45, 55, 68	5	139, 162, 193	6	82, 98, 113, 122	6																																																																														
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2C-	<p>Mounting Flange:</p> <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, 4, 5, 6</td> </tr> </tbody> </table>	Code	Flange	Frame Size	2B	SAE B, 2-BOLT	1	2C	SAE C, 2-BOLT	2, 3, 4, 5, 6																																																																																																					
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R-	Shaft rotation when looking at the shaft: R= Right Hand (CW), L=Left Hand (CCW)																																																																																																														
12	Series																																																																																																														

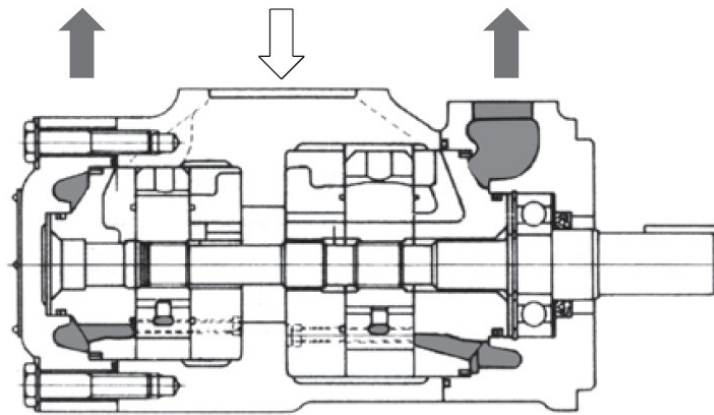
Example Part Number: PFV113/46-K1.25-2C-F1.25F.750/45-R-12

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
7	Retaining Ring	1

Item	Description	Qty.
8	Retaining snap ring	1
9	O-Ring	1
10	Front Cartridge vane set (replaceable)	1
11	Body	1
12	Hexagon Bolt	4
13	Rear Cartridge Vane Set (replaceable)	1
14	O-ring	1

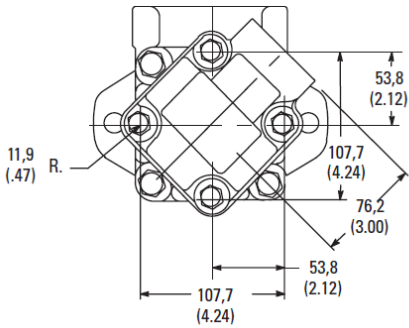
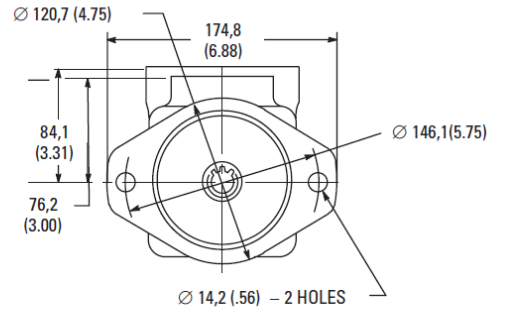
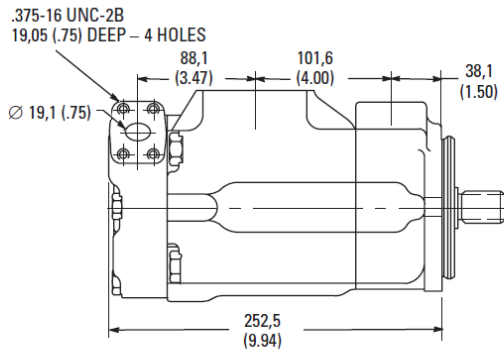
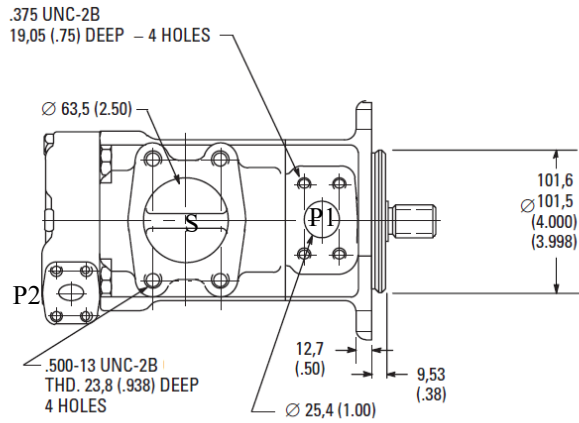


Technical Specifications:

Frame	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	3000 (210)	2700	600	$\text{cc/rev.} \times \text{rpm}/1000/3.8 = \text{gpm}$ $\text{cc/rev.} \times \text{rpm}/1000 = \text{lpm}$.10 (.53)	23.0 (33.0)	Mineral Based Oil
2	3000 (210)	2700	600		.10 (.53)	33 (72.6)	
3	3000 (210)	2600	600		.10 (.53)	35 (77.2)	
4	3000 (210)	2400	600		.10 (.53)	46 (101.4)	
5	3000 (210)	2400	600		.10 (.53)	48 (105.8)	
6	3000 (210)	2400	600		.10 (.53)	58 (127.9)	

Section 2 – Dimensional Data, Frame 1

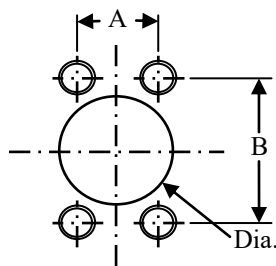
inch (mm)



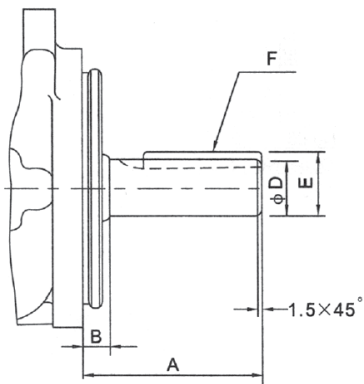
Ports:

SAE Code 61 (Normal Pressure)				
Port	Code	(Dia) in.	(A) in.	(B) In.
P2	F.75	¾	0.875	1.875
P1	F1	1	1.031	2.062
S		2 ½	2	3.5

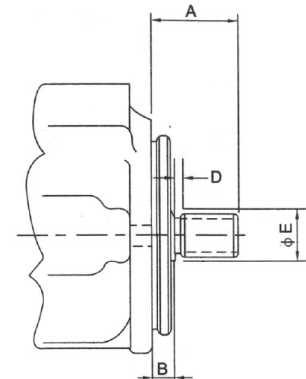
SAE 4-Bolt Flange



Keyed Shaft:



Spline Shaft:

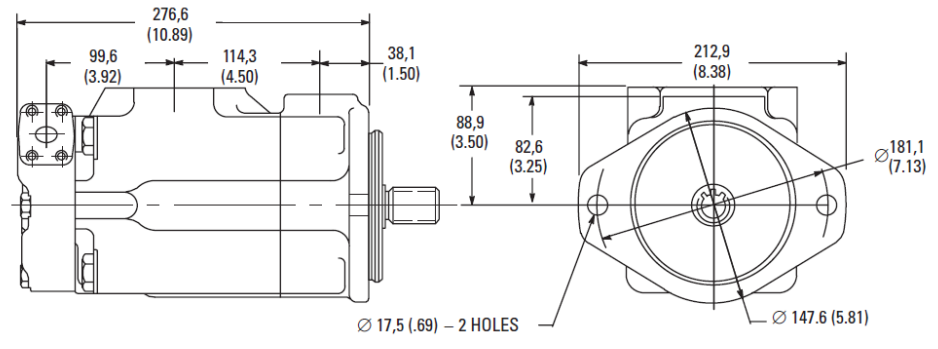
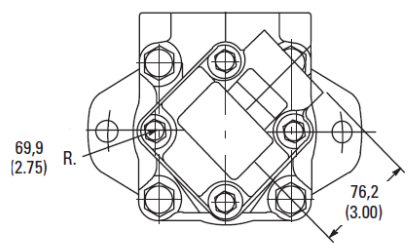
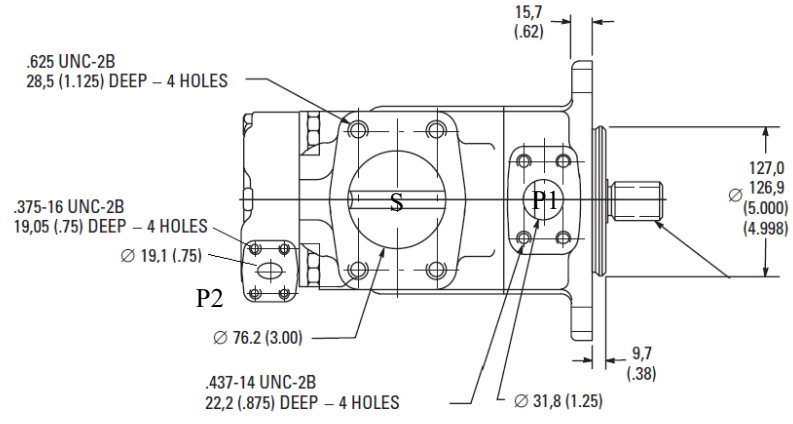


Code	Frame	A	B	ØD	E	F Key Width x Length
K.8S	1	59	11.1	22.23/22.20	24.5/24.4	4.76 x 32
K1	1	78	11.1	25.37/25.35	28.3/28.1	6.36 x 50.8

Code	Frame	A	B	D	ØE	Spline Details
13T.8	1	44.5	11.1	3.9	27.8	13T 16/32

Section 2 – Dimensional Data, Frame 2

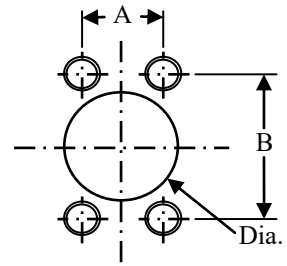
inch (mm)



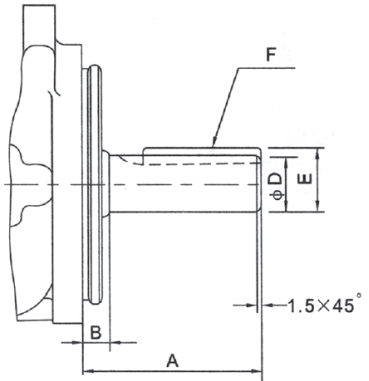
Ports:

SAE Code 61 (Normal Pressure)				
Port	Code	(Dia) in.	(A) in.	(B) In.
P2	F.75	3/4	0.875	1.875
P1	F1.25	1 1/4	1.188	2.312
S		3	2.438	4.188

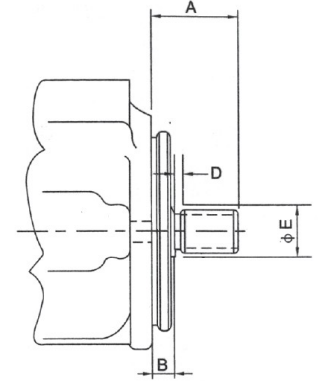
SAE 4-Bolt Flange



Keyed Shaft:



Spline Shaft:

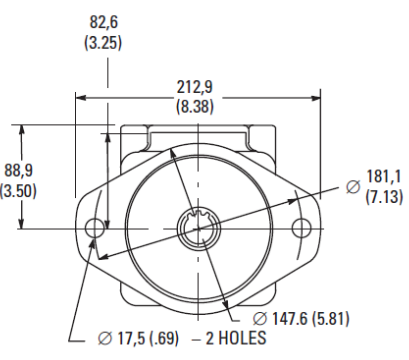
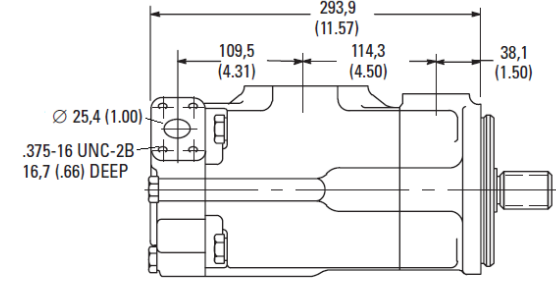
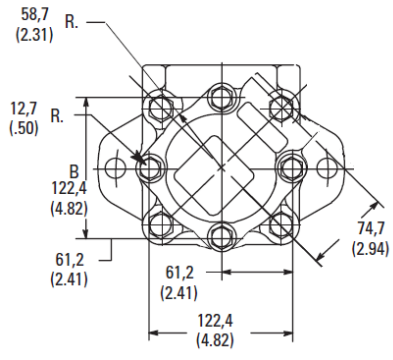
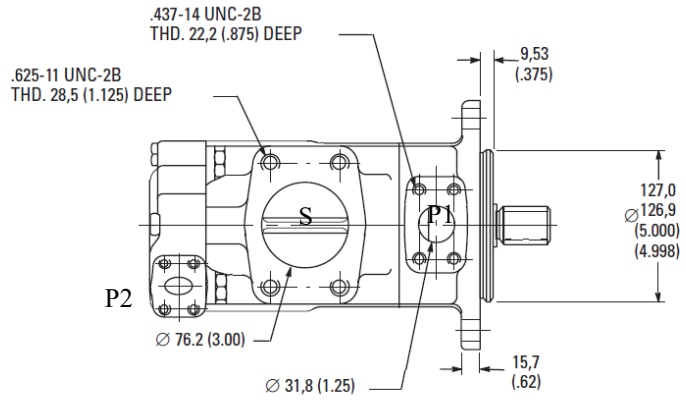


Code	Frame	A	B	ØD	E	F Key Width x Length
K1.25	2	73.2	11.1	31.75/31.70	35.36/35.10	7.94 x 38.1

Code	Frame	A	B	D	ØE	Spline Details
14T	2	58.7	11.1	6.35	35.1	14T 12/24

Section 2 – Dimensional Data, Frame 3

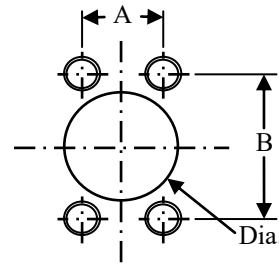
inch (mm)



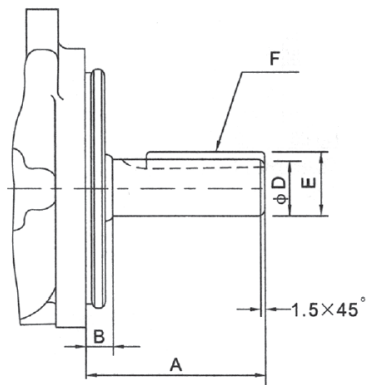
Ports:

SAE Code 61 (Normal Pressure)				
Port	Code	(Dia) in.	(A) in.	(B) In.
P2	F1	1	1.031	2.062
P1	F1.25	1 ¼	1.188	2.312
S		3	2.438	4.188

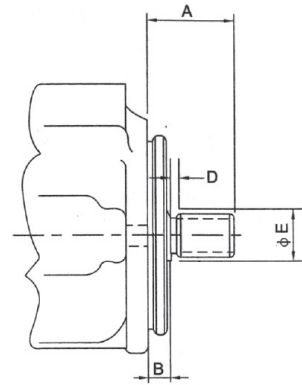
SAE 4-Bolt Flange



Keyed Shaft:



Spline Shaft:

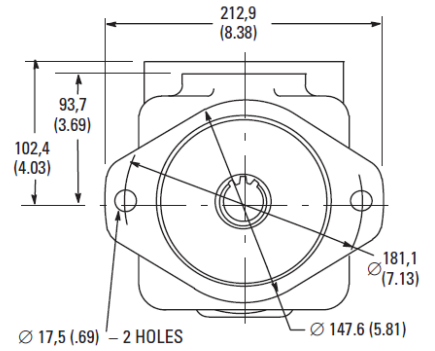
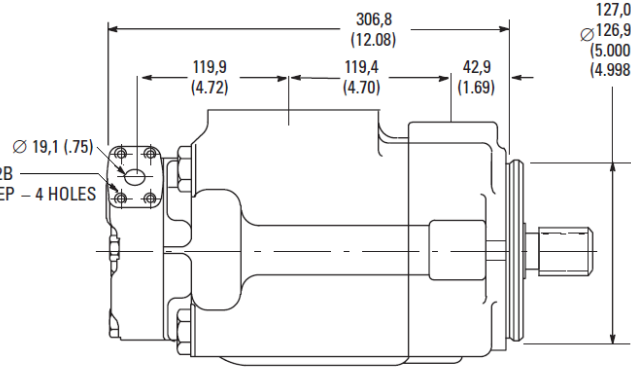
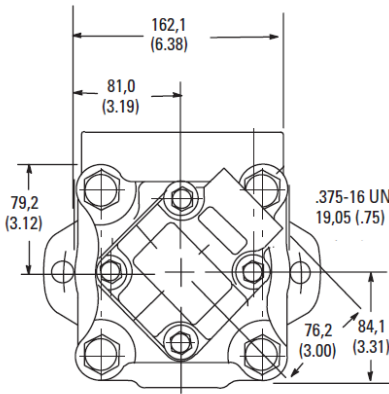
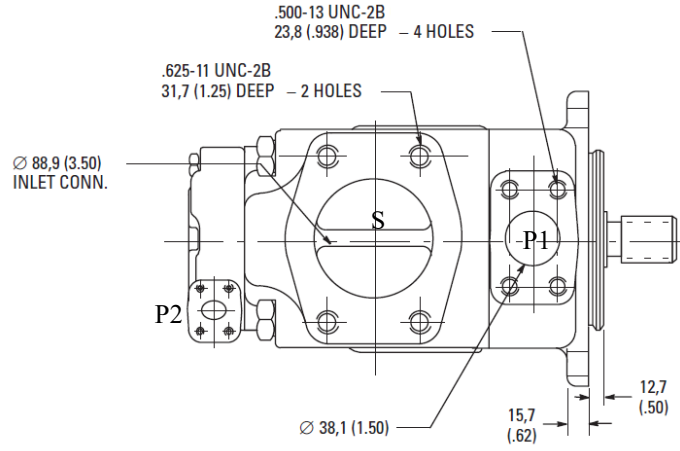


Code	Frame	A	B	ØD	E	F Key Width x Length
K1.25	3	73.2	11.1	31.75/31.70	35.36/35.10	7.94 x 38.1

Code	Frame	A	B	D	ØE	Spline Details
14T	3	58.7	11.1	6.35	35.1	14T 12/24

Section 2 – Dimensional Data, Frame 4

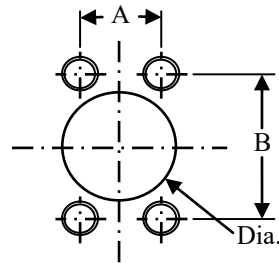
inch (mm)



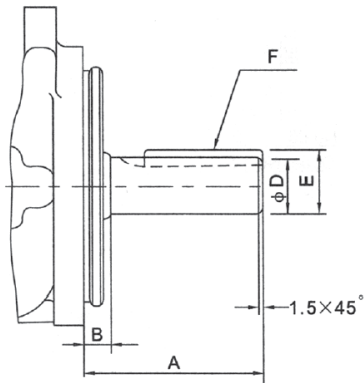
Ports:

SAE Code 61 (Normal Pressure)				
Port	Code	(Dia) in.	(A) in.	(B) In.
P2	F.75	3/4	0.875	1.875
P1	F1.5	1 1/2	1.406	2.75
S		3.5	2.75	4.75

SAE 4-Bolt Flange

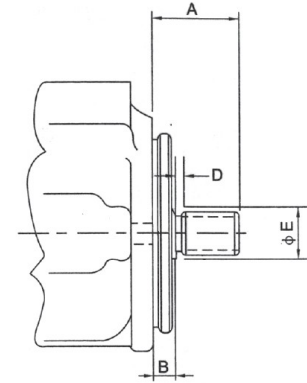


Keyed Shaft:



Code	Frame	A	B	ØD	E	F Key Width x Length
K1.25	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

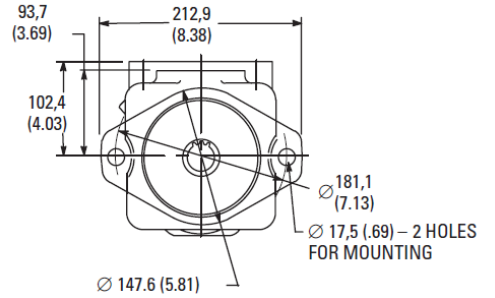
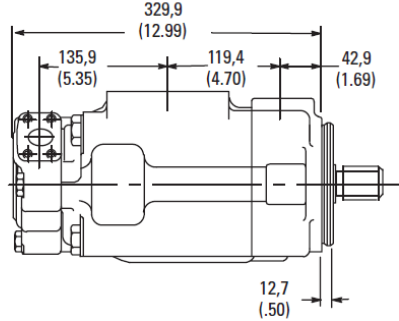
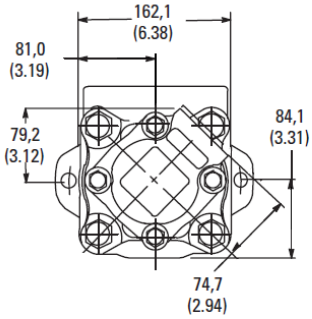
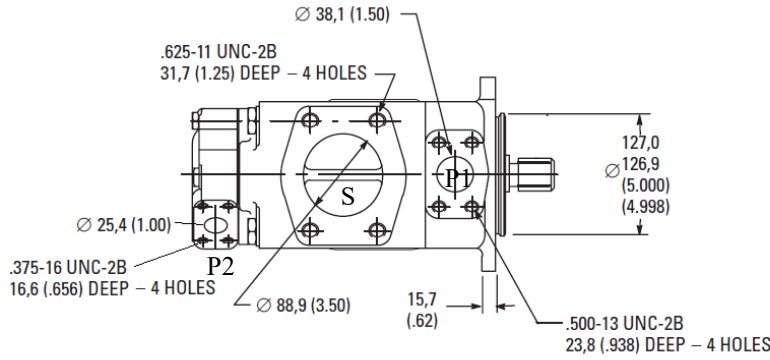
Spline Shaft:



Code	Frame	A	B	D	ØE	Spline Details
14T	3	61.9	14.3	9.7	39.6	14T 12/24

Section 2 – Dimensional Data, Frame 5

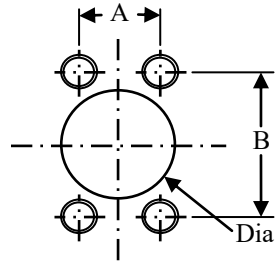
inch (mm)



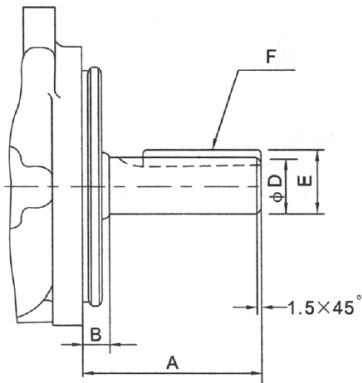
Ports:

SAE Code 61 (Normal Pressure)				
Port	Code	(Dia) in.	(A) in.	(B) In.
P2	F1	1	1.031	2.062
P1	F1.5	1 ½	1.406	2.75
S		3.5	2.75	4.75

SAE 4-Bolt Flange

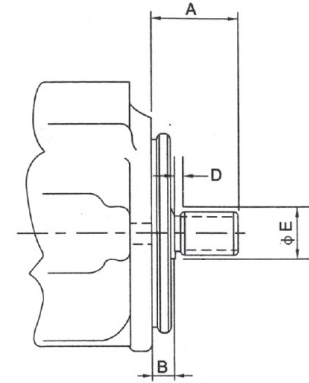


Keyed Shaft:



Code	Frame	A	B	ØD	E	F Key Width x Length
K1.25	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

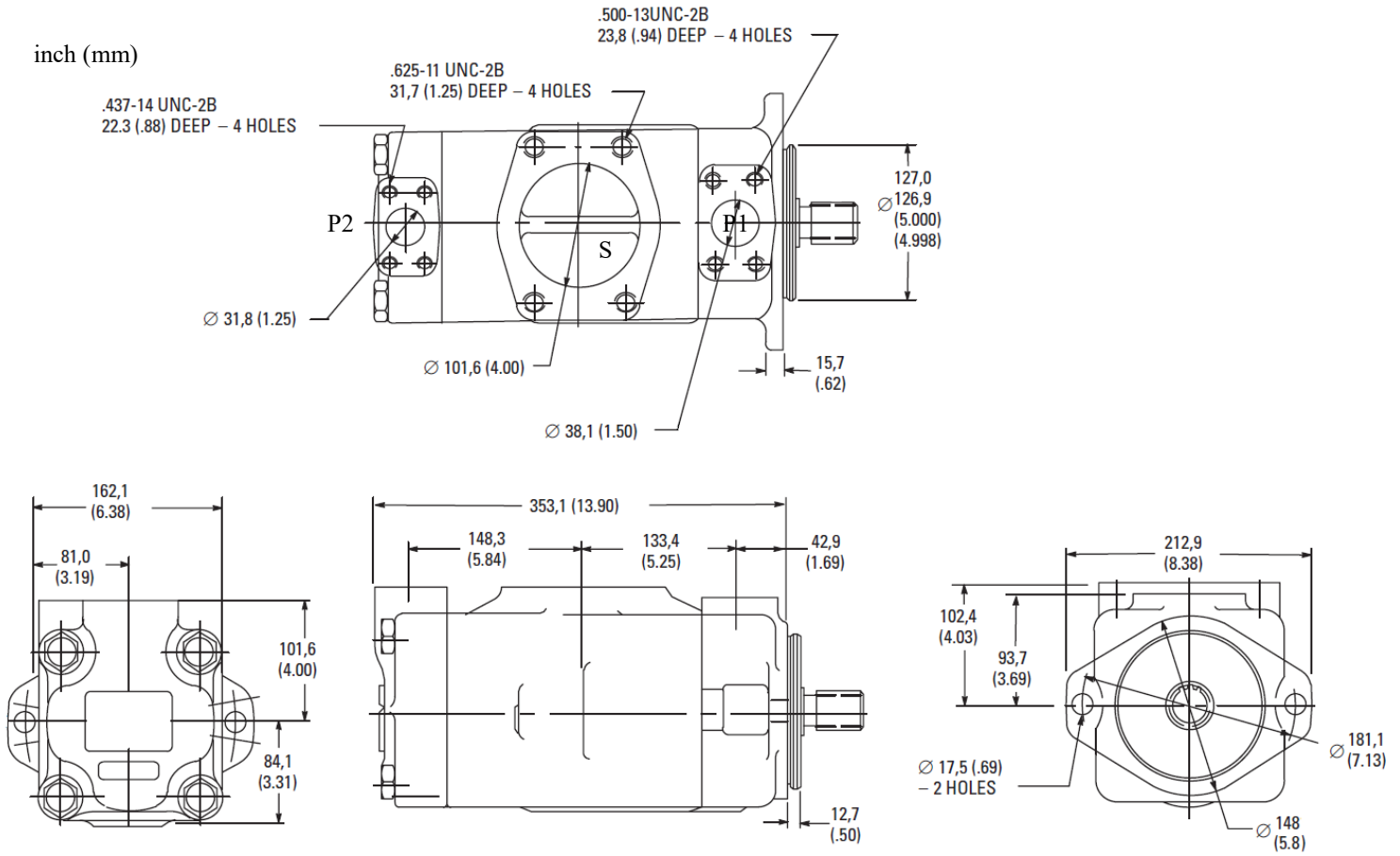
Spline Shaft:



Code	Frame	A	B	D	ØE	Spline Details
14T	3	61.9	14.3	9.7	39.6	14T 12/24

Section 2 – Dimensional Data, Frame 6

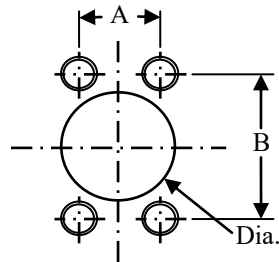
inch (mm)



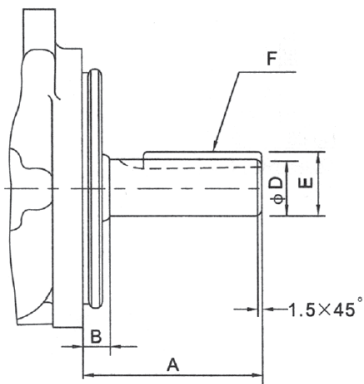
Ports:

SAE Code 61 (Normal Pressure)				
Port	Code	(Dia) in.	(A) in.	(B) In.
P2	F1	1	1.031	2.062
P1	F1.5	1 ½	1.406	2.750
S		4	3.063	5.126

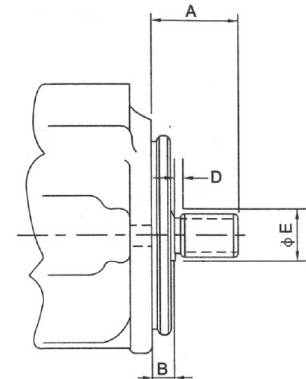
SAE 4-Bolt Flange



Keyed Shaft:



Spline Shaft:



Code	Frame	A	B	ϕD	E	F Key Width x Length
K1.25	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	ϕE	Spline Details
14T	3	61.9	14.3	9.7	39.6	14T 12/24