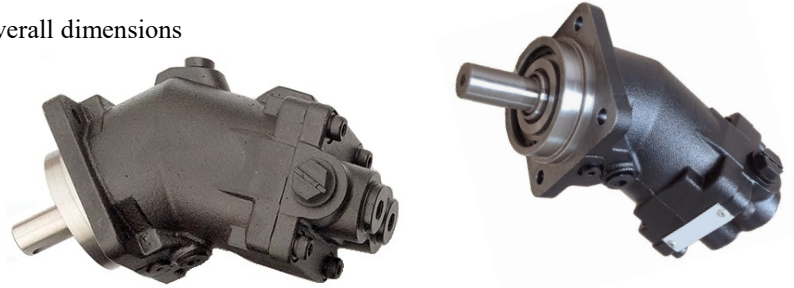


Features

- 40° bent axis piston motor for high power and small overall dimensions
- Bi-directional rotation
- Rotation speed up to 8800 rpm
- Torque up to 840 Nm (619 ft-lbs)
- Side or rear port locations available
- Keyed or Spline Shaft options
- For Mobile and Industrial Applications



Ordering Details

M	Motor																								
F	Fixed																								
BP	Bent Axis Piston																								
10-	CC, Centimeters ³ /rev.: 5, 10, 12, 18, <u>25, 32, 40, 50, 56, 63, 80, 108, 130</u> (<input type="checkbox"/> minimum quantities requirement, consult factory)																								
K1-	Shaft: Keyed																								
	<table border="1"> <thead> <tr> <th>Code</th> <th>Shaft Dia., in.</th> <th>Key Width, in.</th> <th>CC/rev</th> </tr> </thead> <tbody> <tr> <td>K1</td> <td>1</td> <td>0.25</td> <td>5, 10, 12, 18</td> </tr> <tr> <td>K1.2</td> <td>1.25</td> <td>0.312</td> <td>25, 32, 40, 50, 56, 63</td> </tr> <tr> <td>K1.5</td> <td>1.5</td> <td>0.375</td> <td>80, 108</td> </tr> <tr> <td>K1.7</td> <td>1.75</td> <td>0.437</td> <td>130</td> </tr> </tbody> </table>	Code	Shaft Dia., in.	Key Width, in.	CC/rev	K1	1	0.25	5, 10, 12, 18	K1.2	1.25	0.312	25, 32, 40, 50, 56, 63	K1.5	1.5	0.375	80, 108	K1.7	1.75	0.437	130				
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2B-	Mounting Flange:																								
	<table border="1"> <thead> <tr> <th>Code</th> <th>Flange</th> <th>CC/Rev</th> </tr> </thead> <tbody> <tr> <td>2B</td> <td>SAE B, 2-BOLT</td> <td>5, 10, 12, 18</td> </tr> <tr> <td>4C</td> <td>SAE C, 4-BOLT</td> <td>25, 32, 40, 56, 63, 80, 108</td> </tr> <tr> <td>4D</td> <td>SAE D, 4-BOLT</td> <td>130</td> </tr> </tbody> </table>	Code	Flange	CC/Rev	2B	SAE B, 2-BOLT	5, 10, 12, 18	4C	SAE C, 4-BOLT	25, 32, 40, 56, 63, 80, 108	4D	SAE D, 4-BOLT	130												
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O10	Pressure Port:																								
	<table border="1"> <thead> <tr> <th colspan="4">Threaded, SAE O-ring boss</th> </tr> <tr> <th rowspan="2">Code</th> <th rowspan="2">Dash Size</th> <th rowspan="2">Thread</th> <th>CC/Rev.</th> </tr> <tr> <th>Pressure and Suction</th> </tr> </thead> <tbody> <tr> <td>O10</td> <td>-10</td> <td>7/8-14</td> <td>5, 10, 12, 18</td> </tr> <tr> <td>O16</td> <td>-16</td> <td>1 5/16-12</td> <td>25, 32, 40, 50, 56, 63</td> </tr> </tbody> </table>	Threaded, SAE O-ring boss				Code	Dash Size	Thread	CC/Rev.	Pressure and Suction	O10	-10	7/8-14	5, 10, 12, 18	O16	-16	1 5/16-12	25, 32, 40, 50, 56, 63							
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O10	Suction Port:																								
	<table border="1"> <thead> <tr> <th colspan="3">4-bolt Flange, Code 62</th> </tr> <tr> <th rowspan="2">Code</th> <th rowspan="2">Dia., inches</th> <th>CC/Rev.</th> </tr> <tr> <th>Pressure and Suction</th> </tr> </thead> <tbody> <tr> <td>HF1</td> <td>1</td> <td>80, 108</td> </tr> <tr> <td>HF1.2</td> <td>1 1/4</td> <td>130</td> </tr> </tbody> </table>	4-bolt Flange, Code 62			Code	Dia., inches	CC/Rev.	Pressure and Suction	HF1	1	80, 108	HF1.2	1 1/4	130											
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		Pressure and Suction																							
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HF1.2	1 1/4	130																							
R-	Port Location: R=Rear, S=Side																								
B-	Shaft Rotation: B=Bidirectional																								
1	Frame: 1																								

Example Part Number: MFBP10-K1-2B-O10O10S-B-1

Technical Specifications:

Displacement	CC/rev	5	10	12	18	25	32	40	50	56	63	80	108	130
	in ³ /rev	0.3	0.6	0.7	1.1	1.5	2.0	2.4	3.1	3.4	3.8	4.9	6.6	7.9
Oil Flow at Pump rotation of 1800 rpm	LPM	9.0	18.1	21.7	32.5	45.2	57.8	72.3	90.3	101.2	113.8	144.6	195.1	234.9
	GPM	2.4	4.8	5.7	8.6	11.9	15.2	19.0	23.8	26.6	30.0	38.0	51.4	61.8

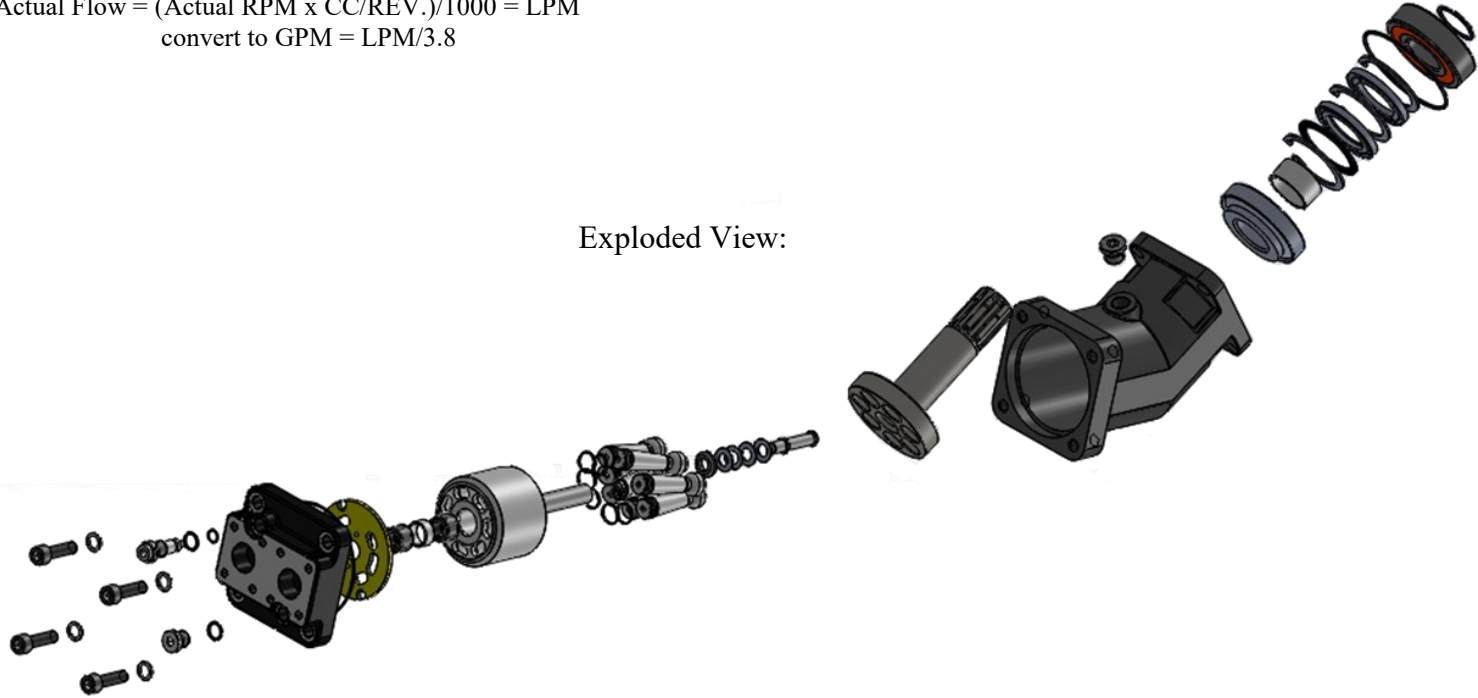
Max. Speed	-Continuous	rpm	8800	8000	8000	8000	6250	6250	5600	5000	5000	5000	4400	4000	3400
	-Intermittent	rpm	9400	8800	8800	8800	6800	6800	6300	5500	5500	5500	4900	4400	4400
Max. Continuous Pressure	bar	400	400	400	400	400	400	400	400	400	400	400	400	400	
	psi	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	5800	
Max. Peak Pressure	bar	450	450	450	450	450	450	450	450	450	450	450	450	450	
	psi	6525	6525	6525	6525	6525	6525	6525	6525	6525	6525	6525	6525	6525	
Torque at 350 bar (5075 psi)	N-m	62	64	66	98	140	174	228	280	320	350	440	600	710	
	Ft-lbs	45	47	48	72	103	128	168	206	236	258	324	442	523	
Torque/Pressure ratio	N-m/bar	0.17	0.17	0.18	0.28	0.4	0.51	0.65	0.8	0.92	1	1.28	1.69	2.1	
	Ft-lbs./psi	0.00864	0.00864	0.00915	0.01423	0.02033	0.02592	0.03304	0.04066	0.04676	0.05083	0.06506	0.08590	0.10674	
Max. Flow	LPM	44	80	96	144	156	200	225	250	282	315	352	433	442	
	GPM	11.6	21.1	25.3	37.9	41.1	52.6	59.2	65.8	74.2	82.9	92.6	113.9	116.3	

Weight	kg	6.0	6.5	6.5	6.5	11.5	11.5	11.5	17.5	18.0	18.0	22.0	22.5	30.5
	lbs.	13.2	14.3	14.3	14.3	25.3	25.3	25.3	38.5	39.6	39.6	48.4	49.5	67.1

Minimum Temperature	°C	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
	°F	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13
Maximum Temperature	°C	110	110	110	110	110	110	110	110	110	110	110	110	110
	°F	230	230	230	230	230	230	230	230	230	230	230	230	230
Hydraulic Fluid Viscosity	Recommended	15 to 200 cSt												
	Max. range	5 to 1600 cSt												

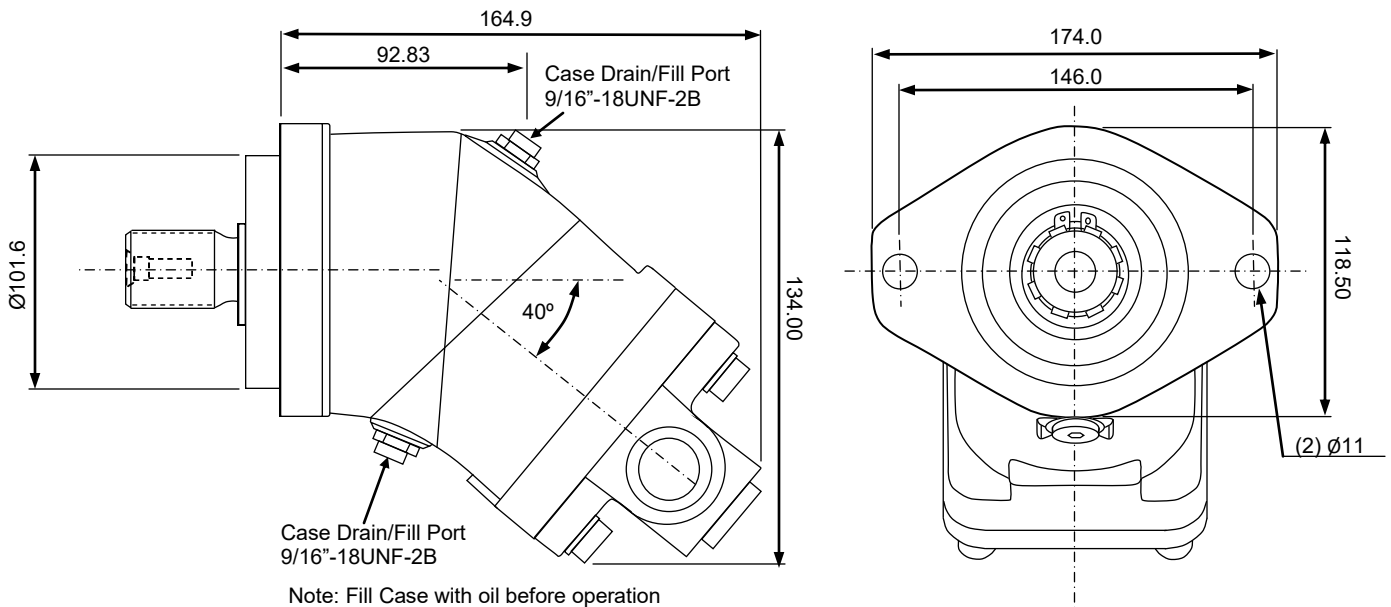
Actual Flow = (Actual RPM x CC/REV.)/1000 = LPM
 convert to GPM = LPM/3.8

Exploded View:

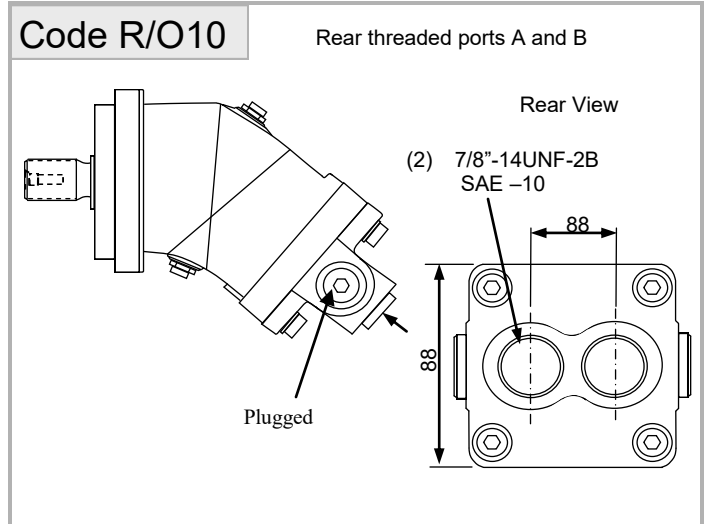
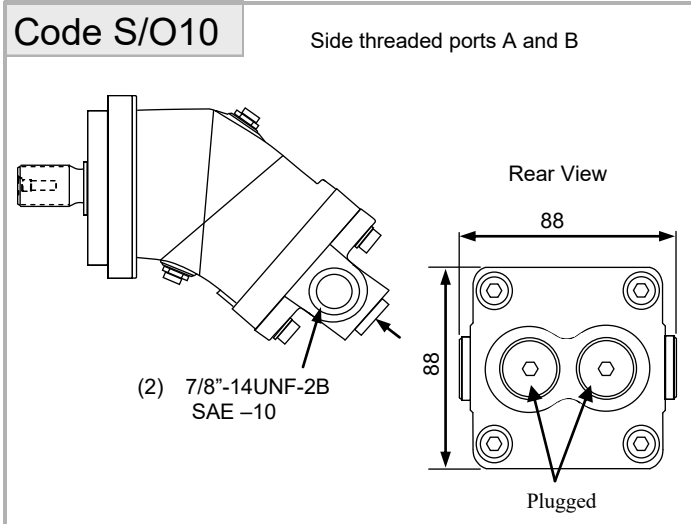


Dimensions: 5, 10, 12 and 18cc (SAE B, 2 Bolt)

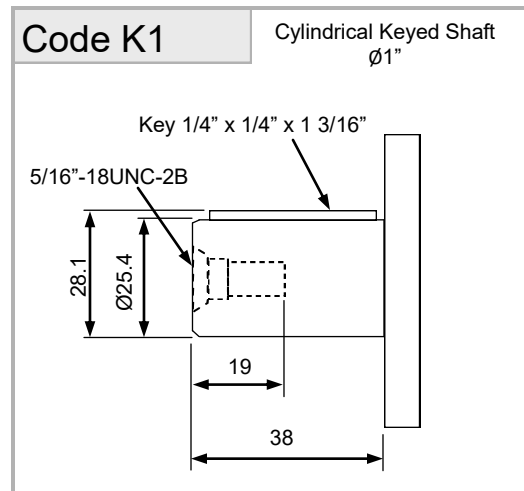
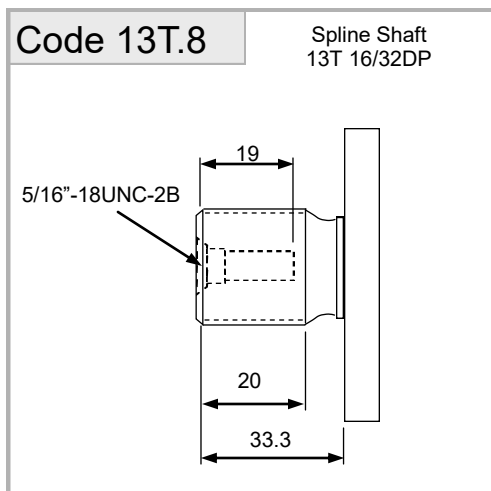
All dimensions in mm unless noted



Ports:

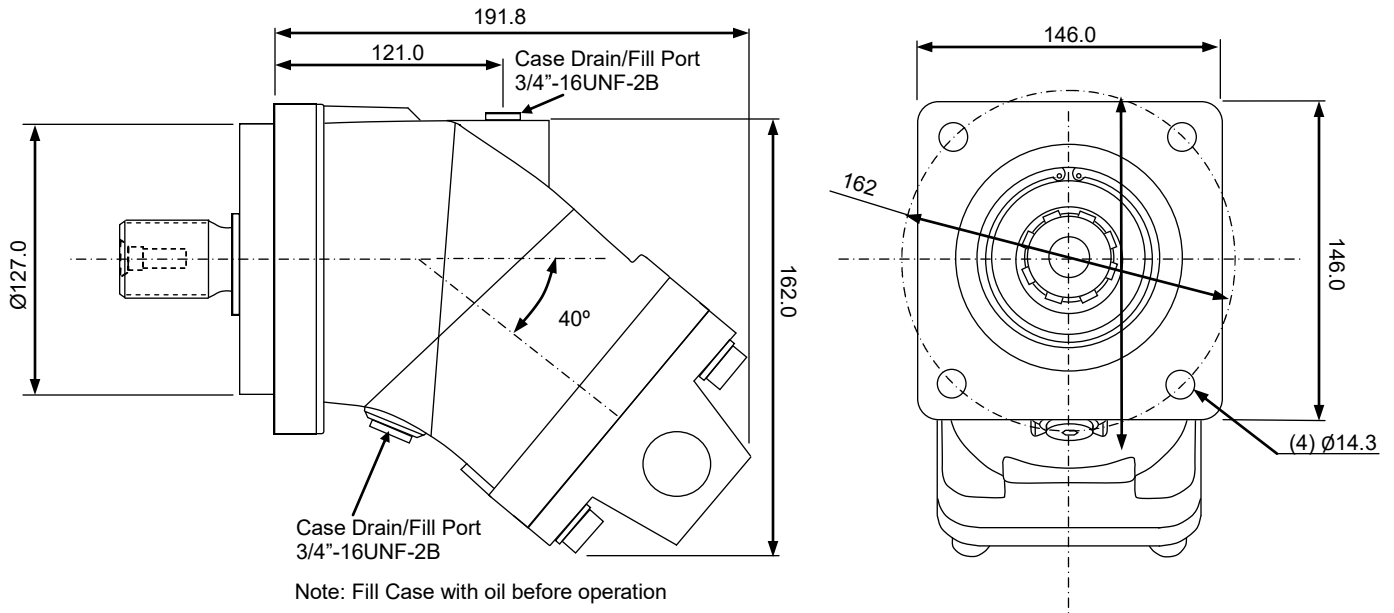


Shafts:



Dimensions: 25cc (SAE C, 4 Bolt)

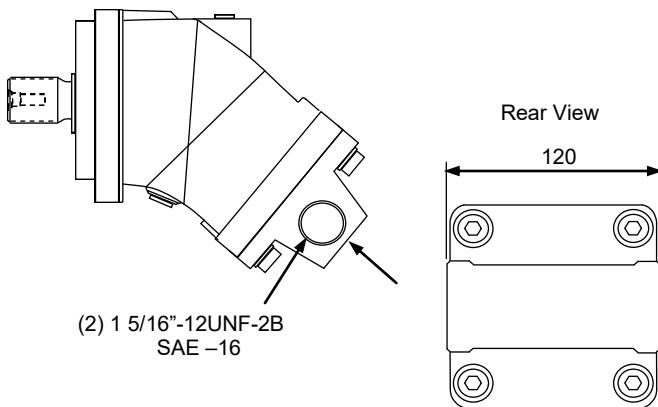
All dimensions in mm unless noted



Ports:

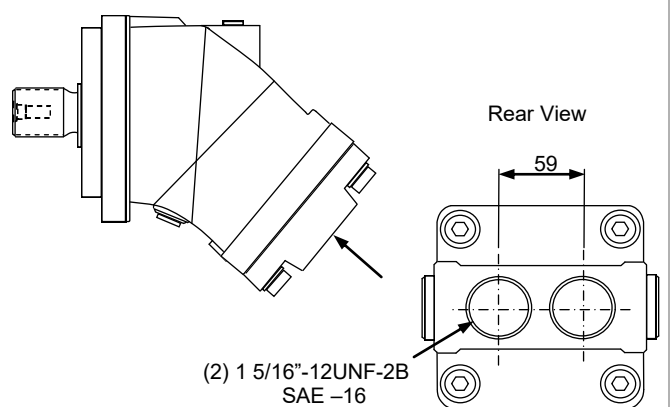
Code S/O16

Side threaded ports A and B



Code R/O16

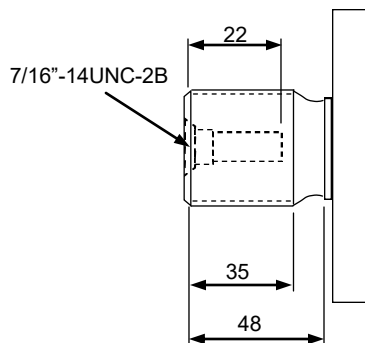
Rear threaded ports A and B



Shafts:

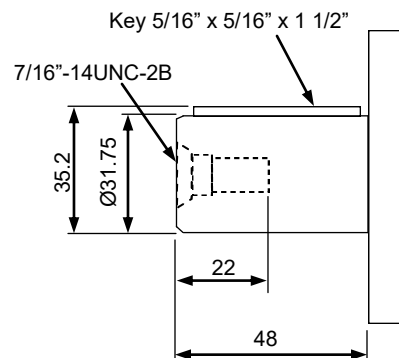
Code 14T

Spline Shaft
14T 12/24DP
1 1/4"



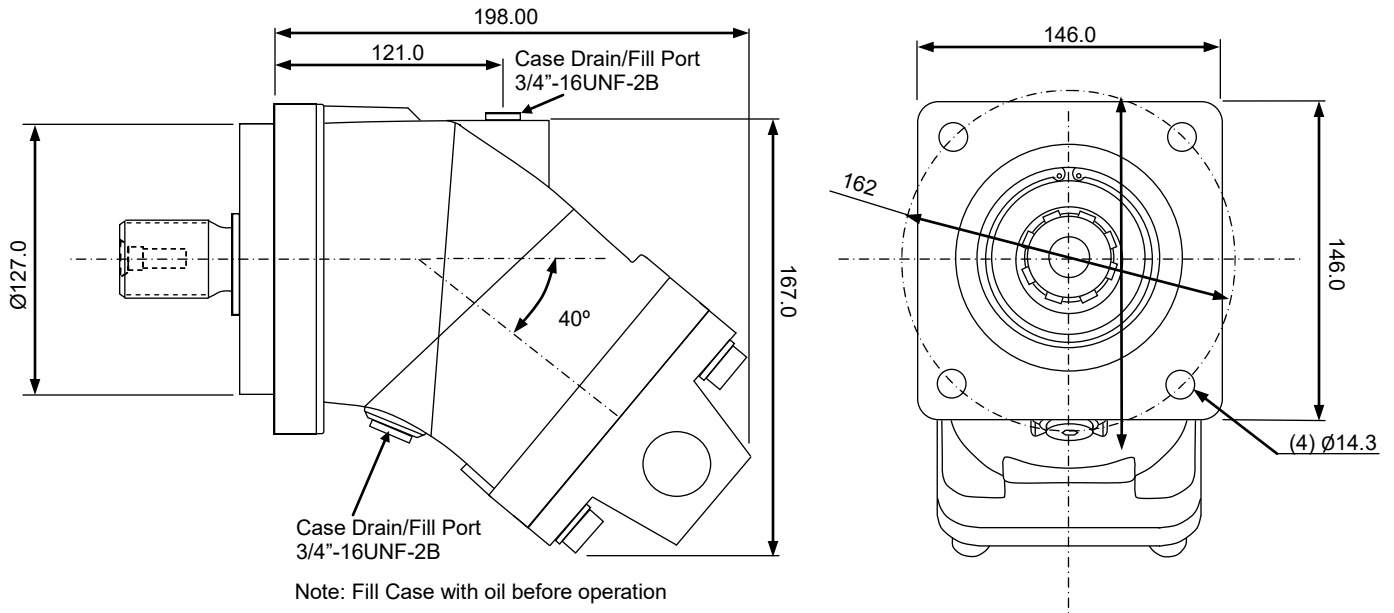
Code K1.2

Cylindrical Keyed Shaft
Ø1 1/4"



Dimensions: 32 and 40cc (SAE C, 4 Bolt)

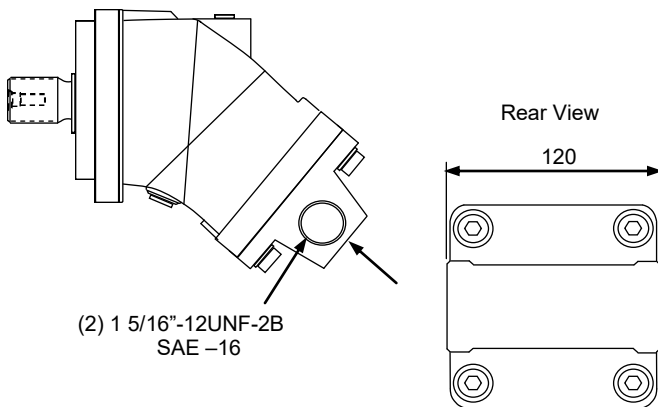
All dimensions in mm unless noted



Ports:

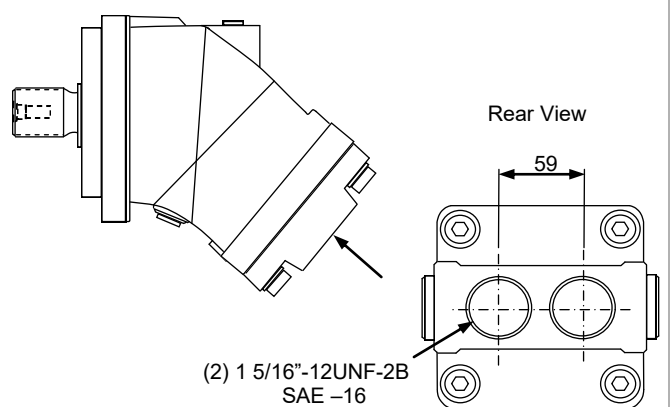
Code S/O16

Side threaded ports A and B



Code R/O16

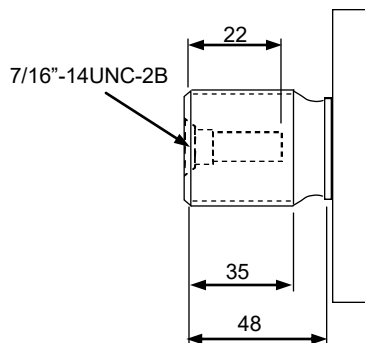
Rear threaded ports A and B



Shafts:

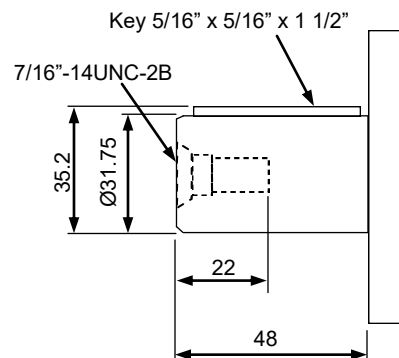
Code 14T

Spline Shaft
14T 12/24DP
1 1/4"



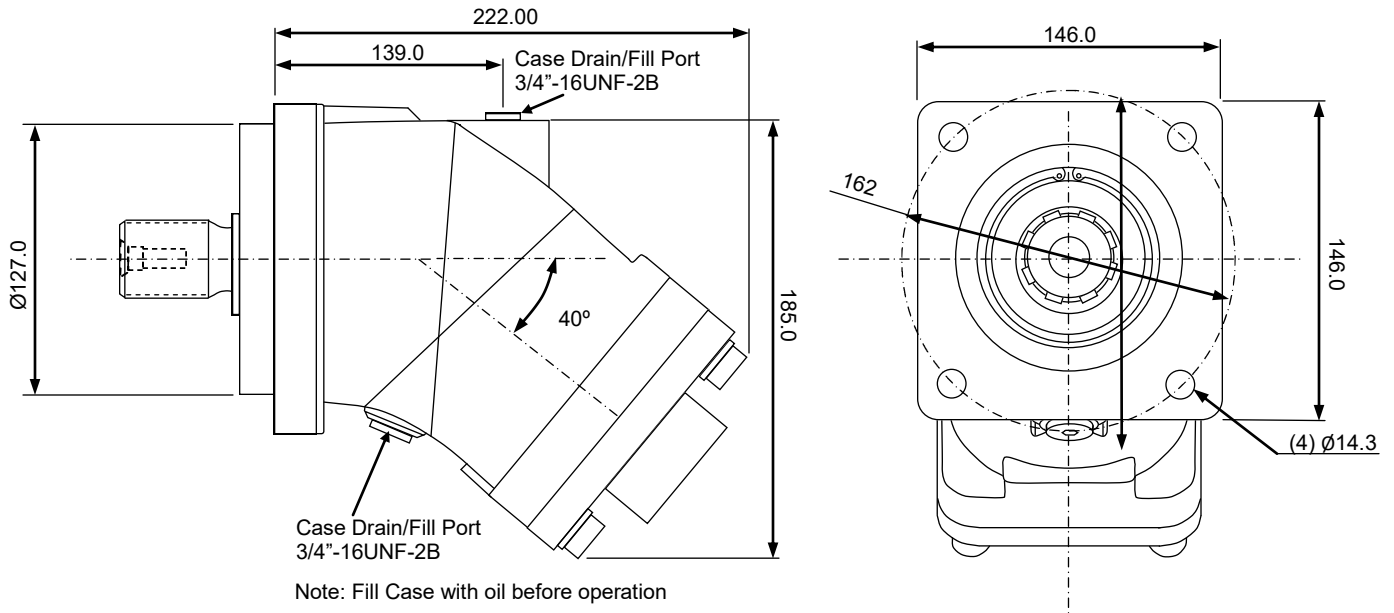
Code K1.2

Cylindrical Keyed Shaft
Ø1 1/4"



Dimensions: 50, 56, 63cc (SAE C, 4 Bolt)

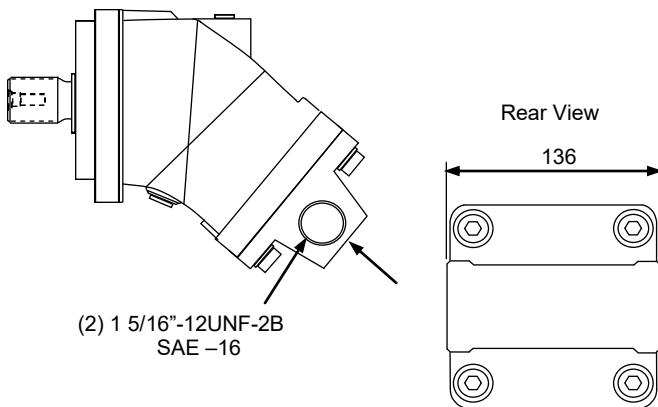
All dimensions in mm unless noted



Ports:

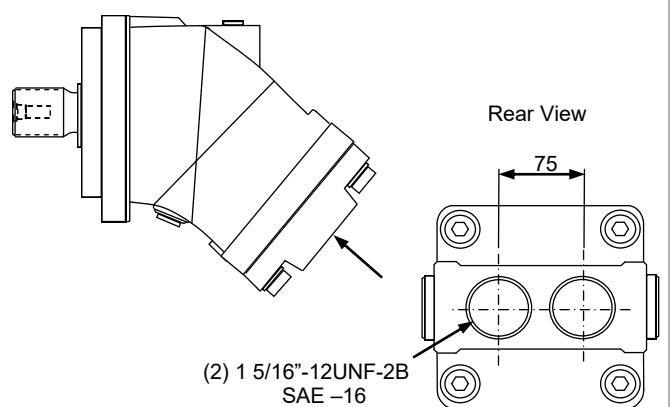
Code S/O16

Side threaded ports A and B



Code R/O16

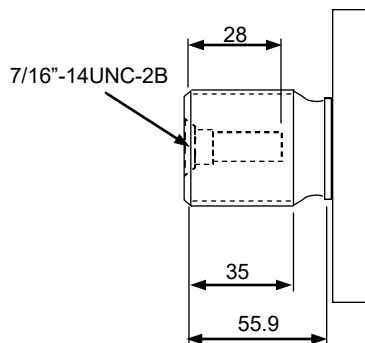
Rear threaded ports A and B



Shafts:

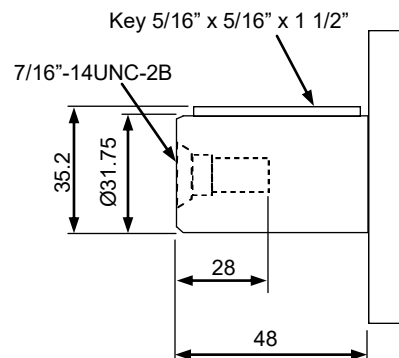
Code 14T

Spline Shaft
14T 12/24DP
1 1/4"



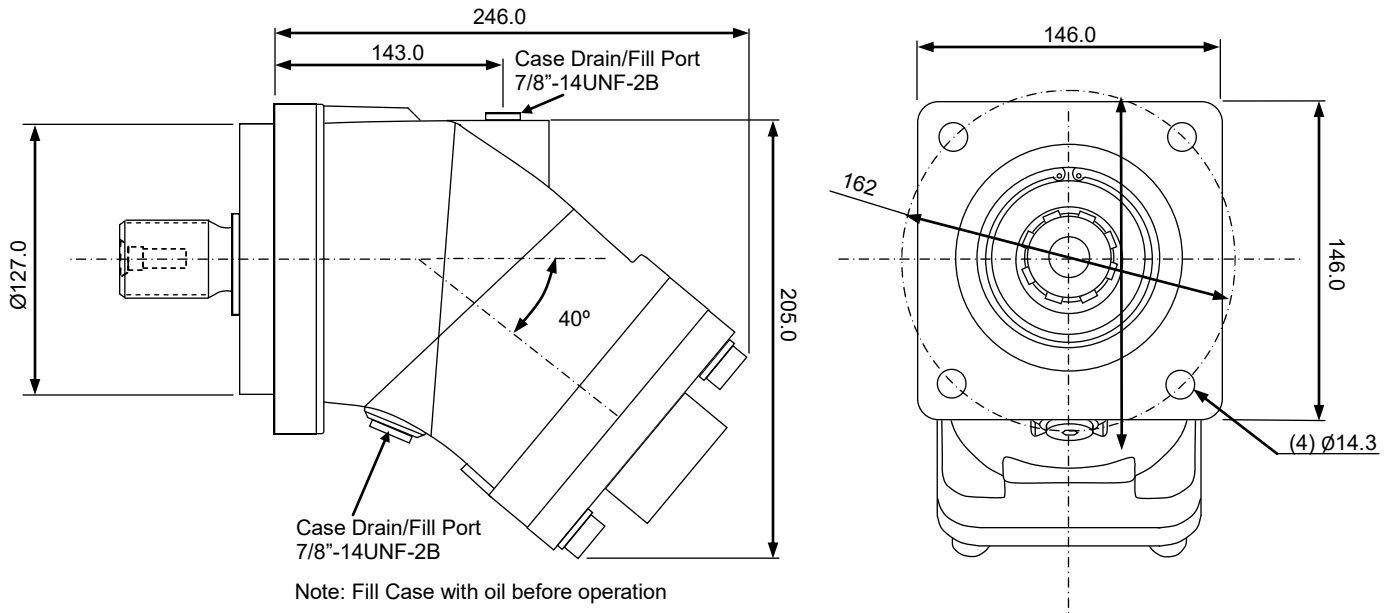
Code K1.2

Cylindrical Keyed Shaft
Ø1 1/4"



Dimensions: 80 and 108cc (SAE C, 4 Bolt)

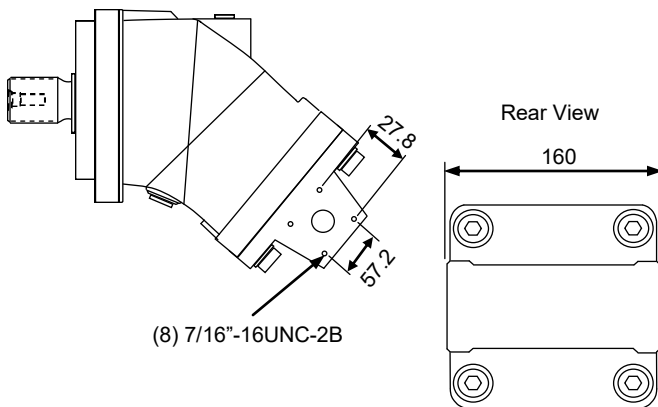
All dimensions in mm unless noted



Ports:

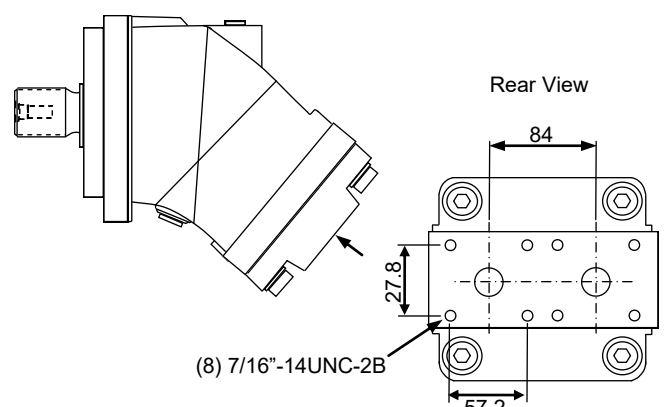
Code S/HF1

Side ports A and B
SAE 1", Code 62 Flange



Code R/HF1

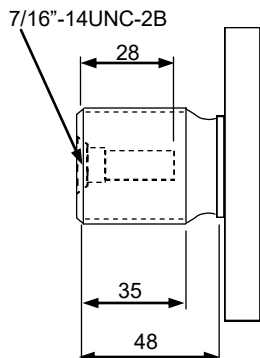
Rear ports A and B
SAE 1", Code 62 Flange



Shafts:

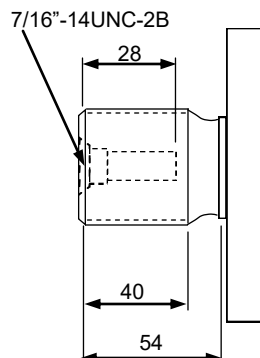
Code 14T

Spline Shaft, 14T 12/24DP
1 1/4"



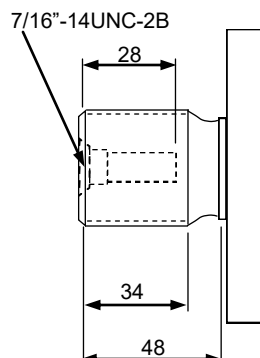
Code 17T

Spline Shaft, 17T 12/24DP
1 1/2"



Code 21T

Spline Shaft, 21T 16/32DP
1 3/8"

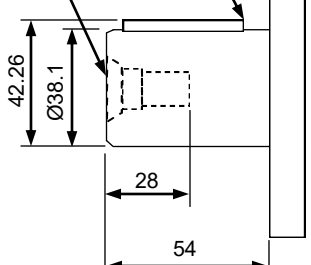


Code K1.5

Cylindrical Keyed Shaft
Ø1 1/2"

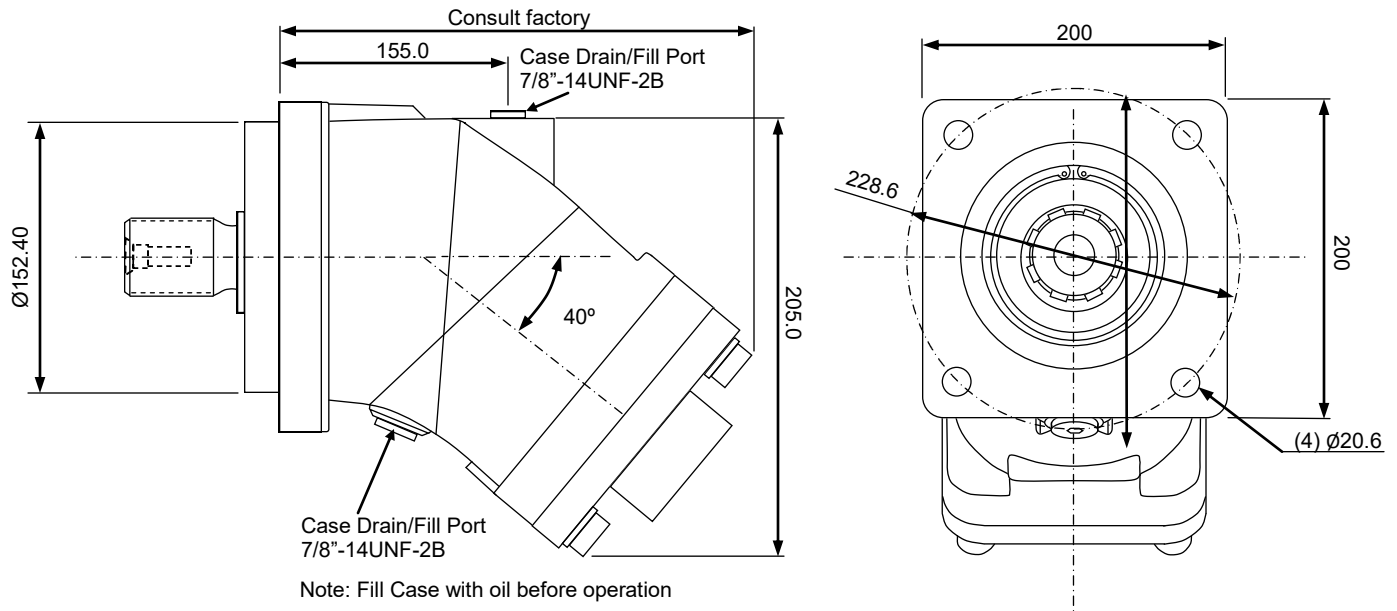
Key 3/8" x 3/8"

7/16"-14UNC-2B



Dimensions: 130cc (SAE D, 4 Bolt)

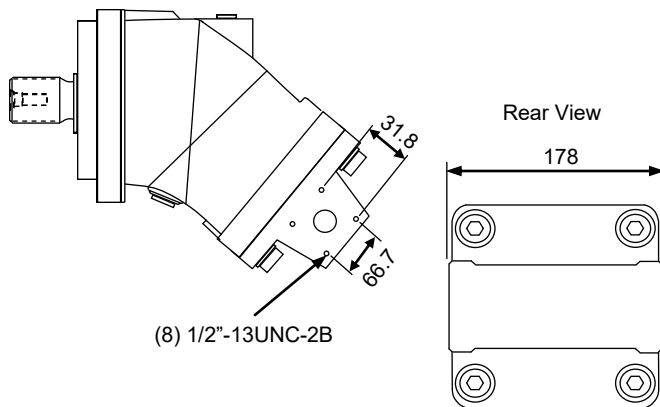
All dimensions in mm unless noted



Ports:

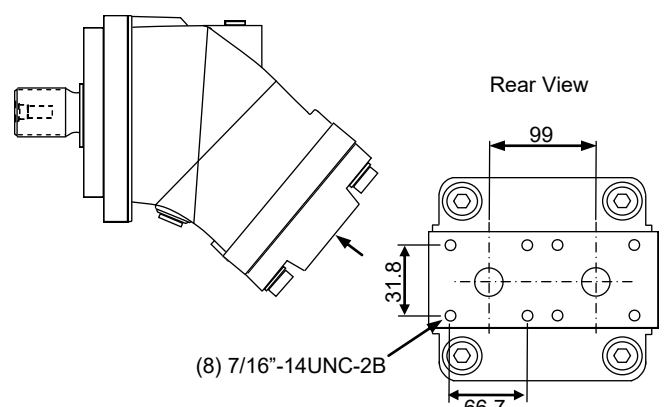
Code S/HF1.2

Side ports A and B
SAE 1 1/4", Code 62 Flange



Code R/HF1.2

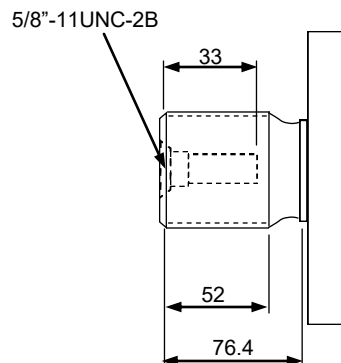
Rear ports A and B
SAE 1", Code 62 Flange



Shafts:

Code 13T1.7

Spline Shaft, 13T 8/16DP
1 3/4"



Code K1.5

Cylindrical Keyed Shaft
Ø1 3/4"

