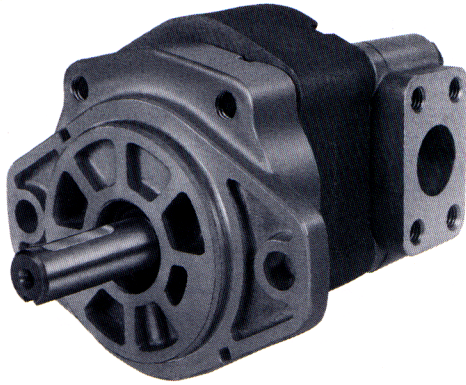


# Model HP16



Description. . . . . Gear Pumps  
 Flow Range . . . . . To 46 GPM (174,1 LTR)  
 Displacements . . To 4.874 C.I.R. (79.87 CC's/REV.)  
 Maximum Pressure to. . . . . 3100 PSI (214 BAR)  
 Maximum Speed to. . . . . 3400 RPM  
 Rotation . . . . . A or C  
 Bearings . . . . . Journal  
 Construction . . . . . Cast Iron Gear Plate with  
 Aluminum Flange and Cover Plate

## Performance Data

PUMP MODEL	SECTION SIZE	DISPLACEMENT/REVOLUTION (Theoretical)					MAXIMUM PRESSURE		MAXIMUM SPEED
		US Gallons	Cubic Inches	Liters	Cubic Centimeters	Imperial Gallons	PSI	BAR	RPM
HP16	85	.0072	1.663	.0273	27.252	.0059	3100	214	3400
HP16	100	.0085	1.964	.0321	32.184	.0070	3100	214	3300
HP16	115	.0097	2.241	.0367	36.723	.0080	3100	214	3100
HP16	150	.0127	2.934	.0481	48.080	.0150	3100	214	2800
HP16	180	.0152	3.511	.0575	57.535	.0126	2500	172	2500
HP16	200	.0169	3.902	.0639	63.942	.0140	2250	155	2500
HP16	250	.0211	4.874	.0798	79.871	.0175	1800	124	2200

All data based on SAE 10W oil at 150°F.  
 Available with Viton Seals for use with phosphate ester base fluids.

**CAUTION:** "Inlet vacuum" should not exceed 5" Hg at normal operating speed and temperature.  
 Operation of pumps in excess of 5" Hg requires factory approval.

When sizing pumps, refer to the performance charts in the back of the catalog to determine the volumetric efficiency and input horsepower requirements.

## How To Order

'A' denotes counterclockwise rotation  
 'C' denotes clockwise rotation  
 When viewed from drive shaft end



Note: Add prefix 'V' to pump model number (VHP16) when ordering pumps with Viton Seals for use with phosphate ester base fluids.

# Shafts Available

**2** **7/8" Dia. 13 Tooth Spline**  
**Flat Root Side Fit**  
 Torque Limit 184 Lbs. Ft. (249,4 Nm)

**Spline Data**  
 Diametral Pitch ..... 16/32  
 Pressure Angle ..... 30°  
 No. Of Teeth ..... 13

**5** **7/8" Straight Shaft**  
 Torque Limit 184 Lbs. Ft. (249,4 Nm)

**7** **1" Dia. 15 Tooth Spline**  
**Flat Root Side Fit**  
 Torque Limit 341 Lbs. Ft. (462,3 Nm)

**Spline Data**  
 Diametral Pitch ..... 16/32  
 Pressure Angle ..... 30°  
 No. Of Teeth ..... 13

**8** **1" Straight Shaft**  
 Torque Limit 341 Lbs. Ft. (462,3 Nm)

# Mounting Flanges Available

**D** **SAE 'A' 2-Bolt**

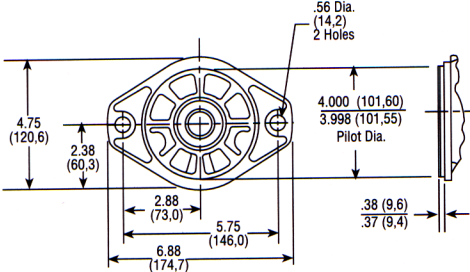
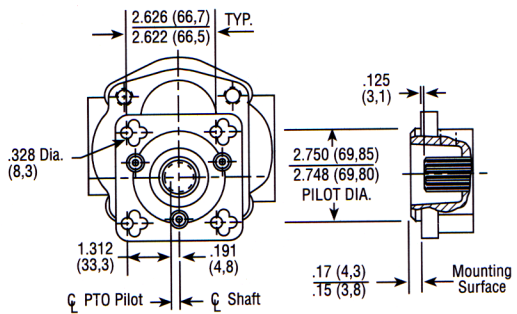
**E** **6-Bolt Round**  
 Available with No. 2 or 5 Shaft Only

**F** **Pad Mount**

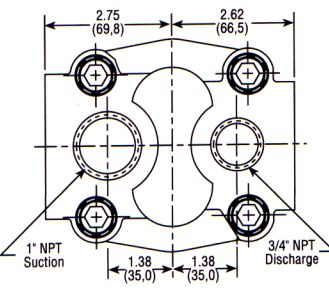
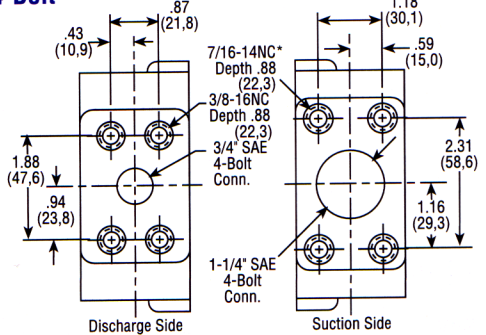
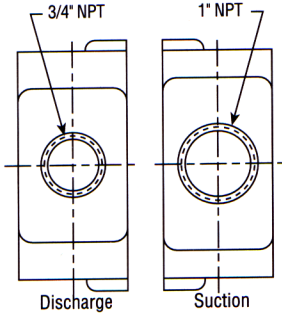
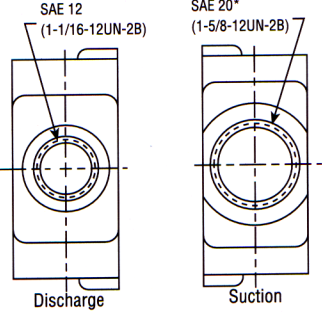
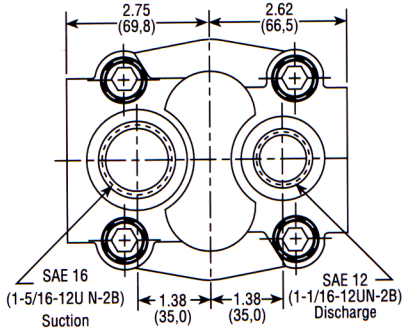
**G** **SAE 'C' 4-Bolt**  
 Available for No. 2 or 5 Shaft Only

**J** **SAE 'B' 4-Bolt**  
 Available with No. 2 or 5 Shaft Only (Typ.)

# Mounting Flanges Available, Continued

<p><b>N</b> <b>SAE 'B' 2-Bolt</b></p> 	<p><b>S</b> <b>P.T.O. Direct Mount</b> Available with No. 2 Shaft Only</p> 
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# Cover Plates Available

<p><b>2</b> <b>Rear Ported NPTF</b></p> <p><b>7</b> <b>Rear Ported BSPT</b></p> 	<p><b>3</b> <b>Side Ported SAE 4-Bolt</b></p>  <p style="text-align: center;">SAE 4-Bolt NPT Connectors Are Available. See Accessory Section Metric Threads are available – Consult Factory</p>	
<p><b>4</b> <b>Side Ported NPTF</b></p> <p><b>8</b> <b>Side Ported BSPT</b></p> 	<p><b>5</b> <b>Side Ported Straight Thread</b></p> 	<p><b>6</b> <b>Rear Ported Straight Thread</b></p> 

- \* These dimensions locate  $\phi$  of bolt pattern only.
- \*\* These tapped holes will have 1° taper on minor diameter.

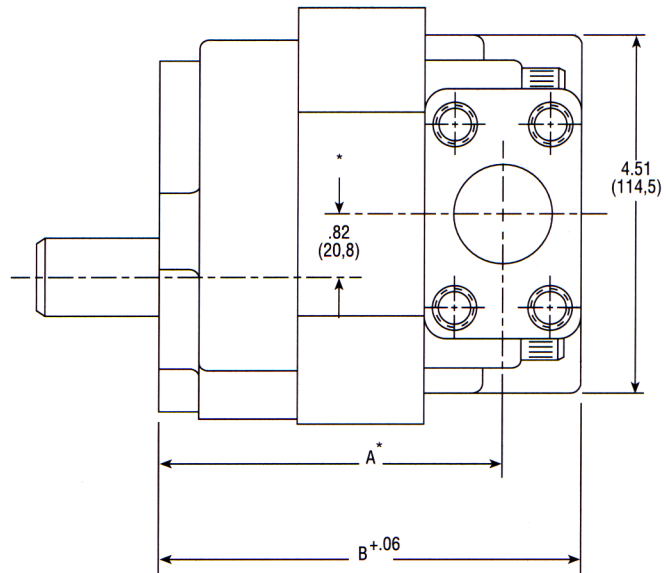
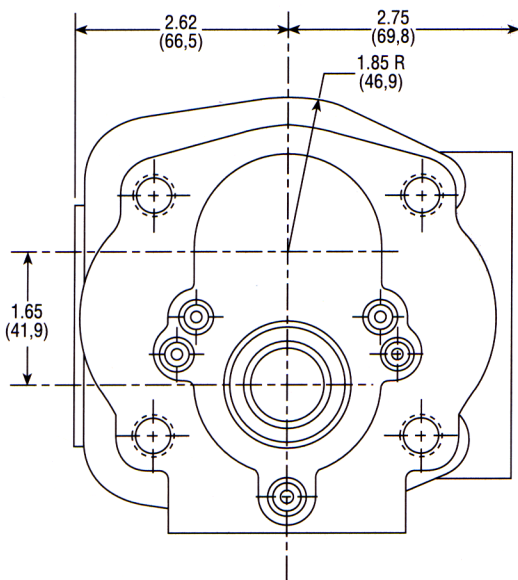
# Dimensional Data

## Mounting Dimensions

PUMP MODEL	FLANGE TYPE						SHIPPING WEIGHTS (Approx.)	
	D		E, J, G		F			
	A	B	A	B	A	B	lbs.	kgs.
HP16 - 85	3.90 (99,06)	4.91 (124,71)	5.03 (127,76)	6.04 (153,42)	4.03 (102,36)	5.04 (128,02)	15	6.8
HP16 - 100	4.03 (102,36)	5.04 (128,02)	5.15 (130,81)	6.16 (156,46)	4.15 (105,41)	5.16 (131,06)	16	7.3
HP16 - 115	4.15 (105,41)	5.16 (131,06)	5.27 (133,86)	6.28 (159,51)	4.27 (108,46)	5.28 (134,11)	17	7.7
HP16 - 150	4.44 (112,78)	5.45 (138,43)	5.56 (141,22)	6.57 (166,88)	4.56 (115,82)	5.57 (141,48)	18	8.2
HP16 - 180	4.68 (118,87)	5.69 (144,53)	5.80 (147,32)	6.81 (172,97)	4.80 (121,92)	5.81 (147,57)	20	9.1
HP16 - 200	4.84 (122,94)	5.85 (148,59)	5.96 (151,38)	6.97 (177,04)	4.96 (125,98)	5.97 (151,64)	21	9.5
HP16 - 250	5.32 (135,13)	6.33 (160,78)	6.44 (163,58)	7.45 (189,23)	5.44 (138,18)	6.45 (163,83)	22	10.0

## Mounting Dimensions

PUMP MODEL	FLANGE TYPE				SHIPPING WEIGHTS (Approx.)	
	N		S			
	A	B	A	B	lbs.	kgs.
HP16 - 85	3.83 (97,3)	4.84 (122,94)	5.59 (141,99)	6.60 (167,64)	15	6.8
HP16 - 100	3.95 (100,33)	4.96 (125,99)	5.71 (145,03)	6.72 (170,69)	16	7.3
HP16 - 115	4.07 (103,38)	5.08 (129,03)	5.83 (148,08)	6.84 (173,74)	17	7.7
HP16 - 150	4.37 (110,99)	5.38 (136,65)	6.12 (155,45)	7.13 (181,10)	18	8.2
HP16 - 180	4.61 (117,09)	5.62 (142,75)	6.36 (161,54)	7.37 (187,20)	20	9.1
HP16 - 200	4.77 (121,16)	5.78 (146,81)	6.52 (165,61)	7.53 (191,26)	21	9.5
HP16 - 250	5.25 (133,35)	6.24 (158,50)	7.00 (177,80)	8.01 (203,45)	22	10.0



\*These dimensions locate  $\text{C}$  of bolt pattern only.



See "General Product & Safety Information" on inside front cover of this catalog

