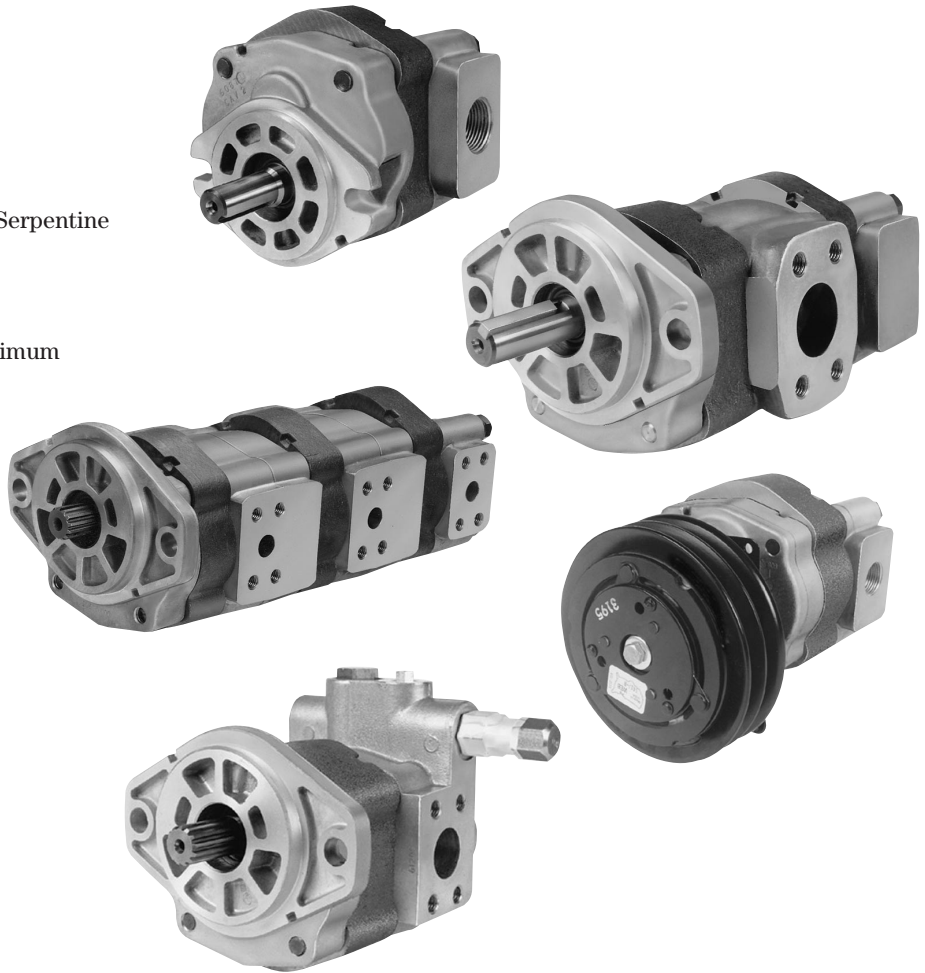


General Information for P16 Series

- Available in various configurations
 - P16 — Single Section
 - TP16 — Tandem, 2 & 3 Place
 - PVP16 — Priority Valve
 - CP16 — Clutch Pump 'V' Belt and Serpentine
- Cast iron pumping sections for durability
- Aluminum flanges and covers for optimum power to weight ratio.
- Journal bearings for long life and good over-hung load capability
- Buna-N Seals are standard for petroleum and glycol based fluids. "Viton®E" seals are optional.
- Pressure balanced plates for greater efficiency.



How to Order P16 Series:

Select the desired symbol (in the correct position) to construct a model code.

Assembly Example:

Options

Code	Description
V	Viton®

MODEL

Code	Description
P	Pump (single)
TP	Tandem Pump
PVP	Priority Valve Pump
CP	Clutch Pump

SECTION SIZE

Code	Cu. In./ Rev.	CC's/ Rev.
45	.878	14.388
65	1.270	20.812
85	1.663	27.252
100	1.964	32.184
115	2.241	36.723
150	2.934	48.080
180	3.511	57.535
200	3.902	63.942

COVER PLATE (FOR MODEL CP)

Code	Port	Inlet	Outlet
1	Side	#20 SAE (1-5/8"-12UN-2B)	#16 SAE (1-5/16"-12UN-2B)
2	Rear	1" NPT	3/4" NPT
3	Side	1-1/4" 4-Bolt	3/4" 4-Bolt
4	Side	1" NPT	3/4" NPT
5	Side	#20 SAE (1-5/8"-12UN-2B)	#12 SAE (1-1/16"-12UN-2B)
6	Rear	#16 SAE (1-5/16"-12UN-2B)	#12 SAE (1-1/16"-12UN-2B)
7	Rear	1" BSPT	3/4" BSPT
8	Side	1" BSPT	3/4" BSPT
9	Side	#20 SAE (1-5/8"-12UN-2B)	#16 SAE (1-1/16"-12UN-2B)
10	Side/Rear	1-1/4" 4-Bolt	#12 SAE (1-1/16"-12UN-2B)
11	Side	1-1/4" 4-Bolt	#12 SAE (1-1/16"-12UN-2B)

16 Series **Section Size** **Rotation** **Flange Options**

Repeat for each tandem section

ROTATION

Code	Direction
A	C'C' Wise
C	C' Wise

SHAFT

Code	Description
1	5/8" 9-Tooth Spline
2	7/8" 13-Tooth Spline
3	7/8" Straight Keyed
5	7/8" Straight Keyed Long
6	3/4" Straight Keyed
8	7/8" Straight Keyed w/ 5/8" Thread
9	7/8" Tapered

CLUTCH

Code	Drive Type
0	None
1	V-Belt - Light Duty
2	V-Belt - Heavy Duty
3	Direct Drive
4	6-Rib Flat Belt

FLANGE

Code	Mounting
D	SAE 'A' 2-Bolt
E	6-Bolt Round
F	Pad (Foot) Mount
G	SAE 'C' 4-Bolt
J	SAE 'B' 4-Bolt
N	SAE 'B' 2-Bolt
S	PTO Direct
T	PTO Direct (Chelsea SPL.)
NONE	Omit For Clutch Pumps

SWITCH KIT

Code	Switch Kit
S	With Switch Kit
O	Without Switch Kit

COVER PLATE (FOR MODEL P, TP, & PVP)

Code	Port	Inlet	Outlet
1	Side	#20 SAE (1-5/8"-12UN-2B)	#16 SAE (1-5/16"-12UN-2B)
2	Rear	1" NPT	3/4" NPT
3	Side	1-1/4" 4-Bolt	3/4" 4-Bolt
4	Side	1" NPT	3/4" NPT
5	Side	#20 SAE (1-5/8"-12UN-2B)	#12 SAE (1-1/16"-12UN-2B)
6	Rear	#16 SAE (1-5/16"-12UN-2B)	#12 SAE (1-1/16"-12UN-2B)
7	Rear	1" BSPT	3/4" BSPT
8	Side	1" BSPT	3/4" BSPT
9	Side	#20 SAE (1-5/8"-12UN-2B)	#16 SAE (1-1/16"-12UN-2B)
10	Side/Rear	1-1/4" 4-Bolt	#12 SAE (1-1/16"-12UN-2B)
11	Side	1-1/4" 4-Bolt	#12 SAE (1-1/16"-12UN-2B)

PVP Pumps Only

PRIORITY PVP ONLY

Code	Flow
1	1-2
2	2-3
3	3-4
4	4-5
5	5-6
6	6-7
7	7-8
8	8-9
9	9-10

Consult Factory For Flows Greater than 10 GPM

PRESSURE SETTING

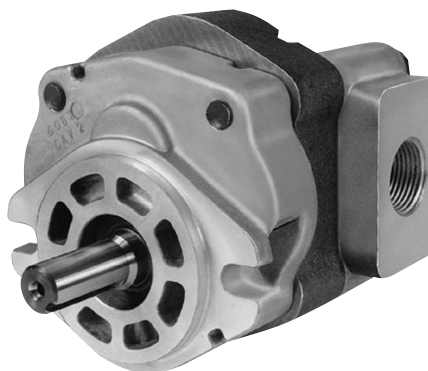
Code	Setting
5	500 PSI
10	1000 PSI
12	1200 PSI

Use 2 digit maximum to indicate pressure setting

*Consult factory for priority flows over 10 GPM.
Note: Add prefix 'V' to pump model number (VP16)
when ordering pumps with Viton® Seals.

Specifications for P16 Series

Description Gear Pumps
 Flow Range TO 38 GPM (143.8 LTR)
 Displacements TO 3.902 C.I.R. (63.94 CC's/REV.)
 Maximum Pressure to 3000 PSI (207 BAR)
 Maximum Speed to 3600 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	
P16	45	.0038	.878	.0144	14.388	.0031	3000	207	3600
P16	65	.0055	1.270	.0208	20.812	.0045	3000	207	3600
P16	85	.0072	1.663	.0273	27.252	.0059	3000	207	3400
P16	100	.0085	1.964	.0321	32.184	.0070	3000	207	3300
P16	115	.0097	2.241	.0367	36.723	.0080	3000	207	3100
P16	150	.0127	2.934	.0481	48.080	.0105	3000	207	2800
P16	180	.0152	3.511	.0575	57.535	.0126	2200	152	2500
P16	200	.0169	3.902	.0639	63.942	.0140	2000	138	2200

All data based on SAE 10W oil at 150°F.
 Available with Viton® Seals.

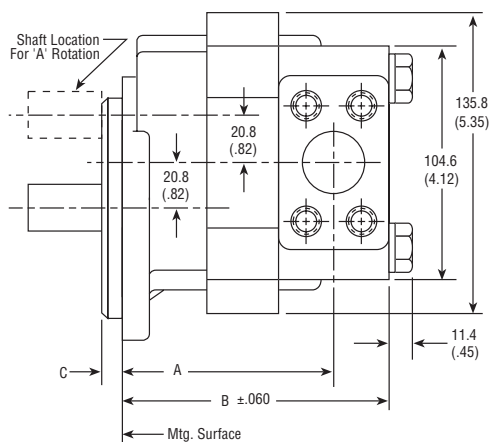


CAUTION: "Inlet vacuum" should not exceed 5" Hg at normal operating speed and temperature. Operation of pumps in excess of 5" Hg requires factory approval.

Dimensional Data

Pump Models	Flange Type								Shipping Weights (Approx.)					
	D		E		F									
	A		B		A		B		A		B		lbs.	kgs.
P16 - 45	89.9	(3.54)	115.6	(4.55)	118.4	(4.66)	144.1	(5.67)	92.9	(3.66)	118.6	(4.67)	12	5.5
P16 - 65	95.3	(3.75)	121.2	(4.77)	123.6	(4.88)	149.6	(5.89)	98.6	(3.88)	124.2	(4.89)	13	5.9
P16 - 85	100.9	(3.97)	126.5	(4.98)	129.3	(5.09)	154.9	(6.10)	103.6	(4.09)	129.5	(5.10)	14	6.4
P16 - 100	104.9	(4.13)	130.6	(5.14)	133.3	(5.25)	159.0	(6.26)	107.9	(4.25)	133.6	(5.26)	15	6.8
P16 - 115	108.9	(4.29)	134.6	(5.30)	137.4	(5.41)	163.1	(6.42)	112.0	(4.41)	137.7	(5.42)	16	7.3
P16 - 150	118.4	(4.66)	144.1	(5.67)	146.8	(5.78)	172.5	(6.79)	121.4	(4.78)	147.1	(5.79)	17	7.7
P16 - 180	126.5	(4.98)	152.2	(5.99)	154.9	(6.10)	180.6	(7.11)	129.5	(5.10)	155.2	(6.11)	19	8.6
P16 - 200	131.8	(5.19)	157.5	(6.20)	160.3	(6.31)	185.9	(7.32)	134.9	(5.31)	160.5	(6.32)	20	9.1

Pump Models	Flange Type								Shipping Weights (Approx.)					
	G&J		N		S&T									
	A	B	A	B	A	B			lbs.	kgs.				
P16 - 45	118.4	(4.66)	144.1	(5.67)	88.1	(3.47)	113.8	(4.48)	132.6	(5.22)	158.2	(6.23)	12	5.5
P16 - 65	123.6	(4.88)	149.6	(5.89)	93.7	(3.69)	119.4	(4.70)	138.2	(5.44)	163.8	(6.45)	13	5.9
P16 - 85	129.3	(5.09)	154.9	(6.10)	99.1	(3.90)	124.7	(4.91)	143.5	(5.65)	169.2	(6.66)	14	6.4
P16 - 100	133.3	(5.25)	159.0	(6.26)	103.1	(4.06)	128.8	(5.07)	147.6	(5.81)	173.2	(6.82)	15	6.8
P16 - 115	137.4	(5.41)	163.1	(6.42)	107.2	(4.22)	132.8	(5.23)	151.6	(5.97)	177.3	(6.98)	16	7.3
P16 - 150	146.8	(5.78)	172.5	(6.79)	116.6	(4.59)	142.2	(5.60)	161.0	(6.34)	186.7	(7.35)	17	7.7
P16 - 180	154.9	(6.10)	180.6	(7.11)	124.7	(4.91)	150.4	(5.92)	169.2	(6.66)	194.8	(7.67)	19	8.6
P16 - 200	160.3	(6.31)	185.9	(7.32)	130.1	(5.12)	155.7	(6.13)	174.5	(6.87)	200.1	(7.88)	20	9.1



C Dimensions

FLANGE TYPE	MM	IN
D	6.35	(.250)
E	4.74	(.187)
F	—	—
G	6.35	(.250)
J	6.35	(.250)
N	9.52	(.375)
S	5.08	(.200)
T	5.08	(.200)

Inch equivalents for millimeter dimensions are shown in (**).