- **Three-piece cast iron construction**
  High efficiency and long life in severe operating environments.
- **Low friction bushing**
  Provides strength in heavy duty applications.
- **Balanced thrust plates**
  Optimize pump efficiency.
- **Largest journal bearings available**
  for high pressure and long life.

Product Features	Description
Pump Type	Heavy Duty, Cast Iron, External Gear
Mounting	SAE Standard Flanges
Ports	SAE Split Flanges and other types of Threaded Ports, See Specifications
Shaft Style	SAE Splined, Keyed, and others, See Specifications
Maximum Speed	2400 RPM
Theor. displacement	See Specifications
Drive	CW, CCW, Double
Inlet pressure	15psig Max Press / 5inHg Max Vac
Outlet pressure	See Specifications
Hydraulic fluids	Mineral Oil, Water-Oil Emulsions 60/40HFB, Water-glycol, HFC, Phosphate-esters, HFD
Fluid viscocity	50 to 7500 SUS; Recommended 80 to 350 SUS
Port Connection	Flange/Straight Threaded

Product Features	Description
Fluid temperature	Mineral oil with standard seals: 0° to 180°F (-20°C to +80°C) Fire resistant fluids HFB, HFC 0° to 150°F (-20°C to +65°C)
Filtration	According to ISO 4406 code: • 20/18/15 at 2000 psi/140 bar • 19/17/14 at 3000 psi/210 bar • 17/15/12 at 4000 psi/275 bar
Direction of rotation (looking at the drive shaft)	CW, CCW, Bi-Rotational
Multiple pump assemblies	Single, Multiple, Piggyback, Thru-Drive
Separate or common inlet capability	Common

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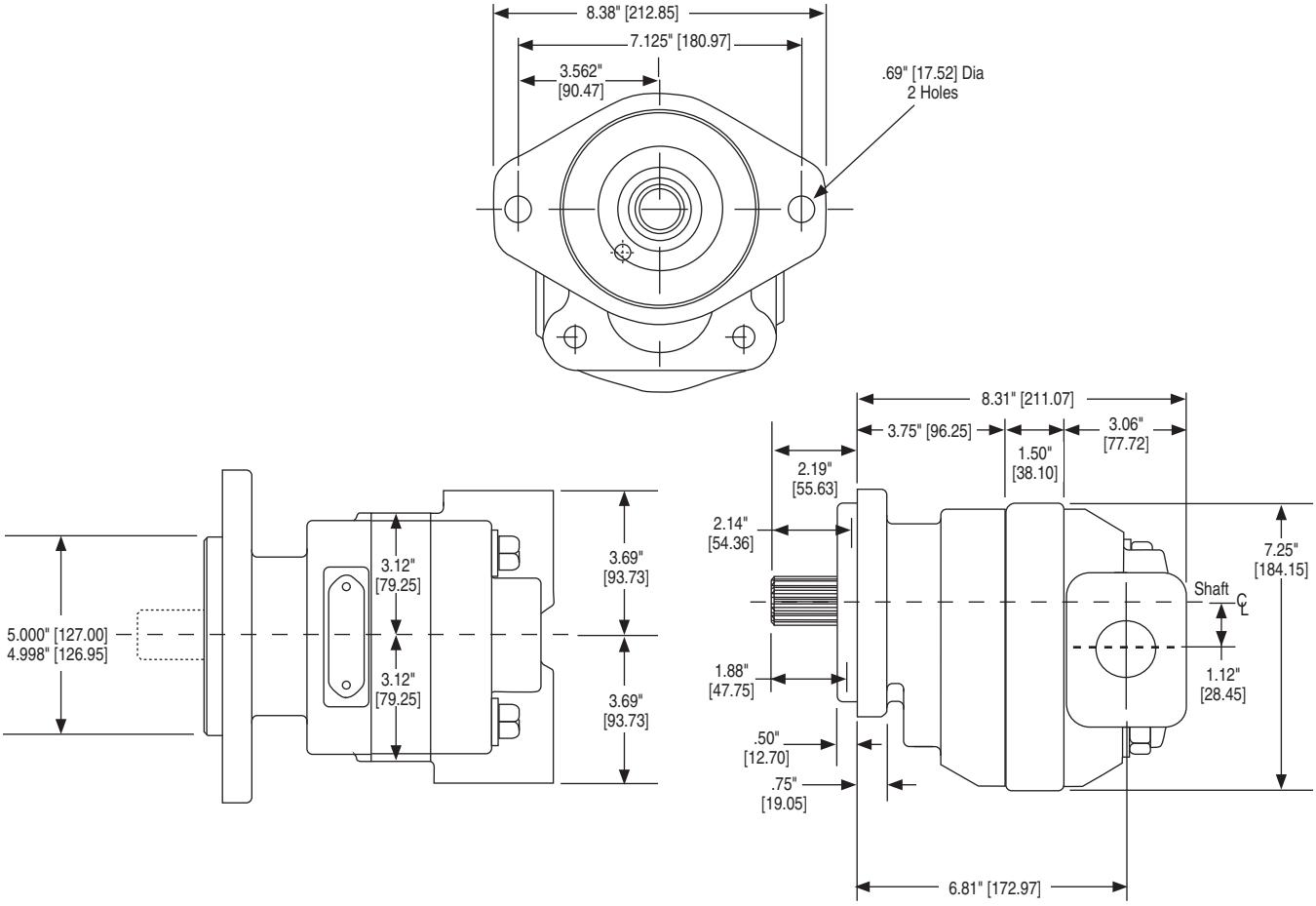
PGP365 Frame Size	07	10	12	15	17	20	22	25
Displacement – cm^3/rev (in^3/rev)	44.3 (2.70)	59.0 (3.60)	73.8 (4.50)	88.5 (5.40)	103.3 (6.30)	118.0 (7.20)	132.8 (8.10)	147.5 (9.00)
Max continuous pressure – bar (psi)	241 (3,500)	241 (3,500)	241 (3,500)	241 (3,500)	241 (3,500)	241 (3,500)	224 (3,250)	207 (3,000)
Max Speed – RPM	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Approximate Weight – Lbs. [kg]	53.5 [24.3]	56 [25.4]	58.5 [26.5]	61.0 [27.7]	63.5 [28.8]	66.0 [30]	68.5 [31.1]	71.0 [32.2]

PGM365 Frame Size	07	10	12	15	17	20	22	25
Displacement – cm^3/rev (in^3/rev)	44.3 (2.70)	59.0 (3.60)	73.8 (4.50)	88.5 (5.40)	103.3 (6.30)	118.0 (7.20)	132.8 (8.10)	147.5 (9.00)
Max continuous pressure – bar (psi)	241 (3,500)	241 (3,500)	241 (3,500)	241 (3,500)	241 (3,500)	241 (3,500)	224 (3,250)	207 (3,000)
Max Speed – RPM	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Approximate Weight – Lbs. [kg]	53.5 [24.3]	56 [25.4]	58.5 [26.5]	61.0 [27.7]	63.5 [28.8]	66.0 [30]	68.5 [31.1]	71.0 [32.2]

PGP/PGM365 Dimensions



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PGP365 Pump Performance Data

Speed RPM	Output Flow / Input Power	Gear Widths							
		3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"
900	GPM	8.0	11.5	14.9	18.4	21.8	25.4	28.8	32.3
	LPM	30	44	57	70	83	96	109	122
	HP	24	31	39	47	55	63	66	67
	kW	18	23	29	35	41	47	49	50
1200	GPM	11.5	16.2	20.8	25.5	30.0	34.7	39.3	44.0
	LPM	44	61	79	96	114	131	149	166
	HP	31	42	52	63	73	84	88	90
	kW	23	31	39	47	55	63	65	67
1500	GPM	15.0	20.9	26.6	32.5	38.2	44.1	49.8	55.6
	LPM	57	79	101	123	145	167	188	211
	HP	39	52	66	79	92	105	110	112
	kW	29	39	49	59	68	78	82	84
1800	GPM	18.5	25.6	32.5	39.5	46.4	53.4	60.3	67.3
	LPM	70	97	123	149	176	202	228	255
	HP	47	63	79	94	110	126	131	135
	kW	35	47	59	70	82	94	98	101
2100	GPM	22.0	30.2	38.3	46.5	54.6	62.8	70.8	79.0
	LPM	83	114	145	176	207	238	268	299
	HP	55	73	92	110	128	147	153	157
	kW	41	55	68	82	96	110	114	117
2400	GPM	25.6	34.9	44.2	53.5	62.8	72.1	81.4	90.7
	LPM	97	132	167	203	238	273	308	343
	HP	63	84	105	126	147	168	175	180
	kW	47	63	78	94	110	125	131	134

PGM365 Motor Performance Data

Speed RPM	Output Torque	Gear Widths													
		1" 3500 psi		1-1/4" 3500 psi		1-1/2" 3500 psi		1-3/4" 3500 psi		2" 3500 psi		2-1/4" 3250 psi		2-1/2" 3000 psi	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B
900	in/lbs	18.4	1865	22.0	2355	25.6	2860	29.2	3370	32.9	3850	36.5	4020	40.1	4125
	Nm	70	210.7	83	266.1	97	323.1	111	380.8	124	435.0	138	454.2	152	466.1
1200	in/lbs	23.3	1845	28.1	2330	32.9	2830	37.6	3335	42.4	3810	47.2	3980	52.0	4080
	Nm	88	208.5	106	263.3	124	319.7	142	376.8	160	430.5	179	449.7	197	461.0
1500	in/lbs	28.2	1815	34.1	2295	40.1	2780	46.0	3280	52.0	3750	57.9	3915	63.8	4020
	Nm	107	205.1	129	259.3	152	314.1	174	370.6	197	423.7	219	442.3	242	454.2
1800	in/lbs	33.1	1805	40.2	2280	47.3	2765	54.4	3265	61.5	3730	68.6	3895	75.7	3995
	Nm	125	203.9	152	257.6	179	312.4	206	368.9	233	421.4	260	440.1	287	451.4
2100	in/lbs	37.9	1755	46.2	2220	54.4	2690	62.8	3160	71.1	3610	79.3	3770	87.6	3865
	Nm	144	198.3	175	250.8	206	303.9	238	357.0	269	407.9	300	426.0	332	436.7
2400	in/lbs	42.8	1705	52.3	2155	61.7	2615	71.2	3055	80.6	3490	90.1	3645	99.5	3740
	Nm	162	192.6	198	243.5	234	295.5	269	345.2	305	394.3	341	411.8	377	422.6

A: Input Flow GPM/LPM; B: Output Torque IN/LBS/Nm
Note: In accordance with our policy of continuing product development, we reserve the right to change specifications shown in this
catalog without notice.

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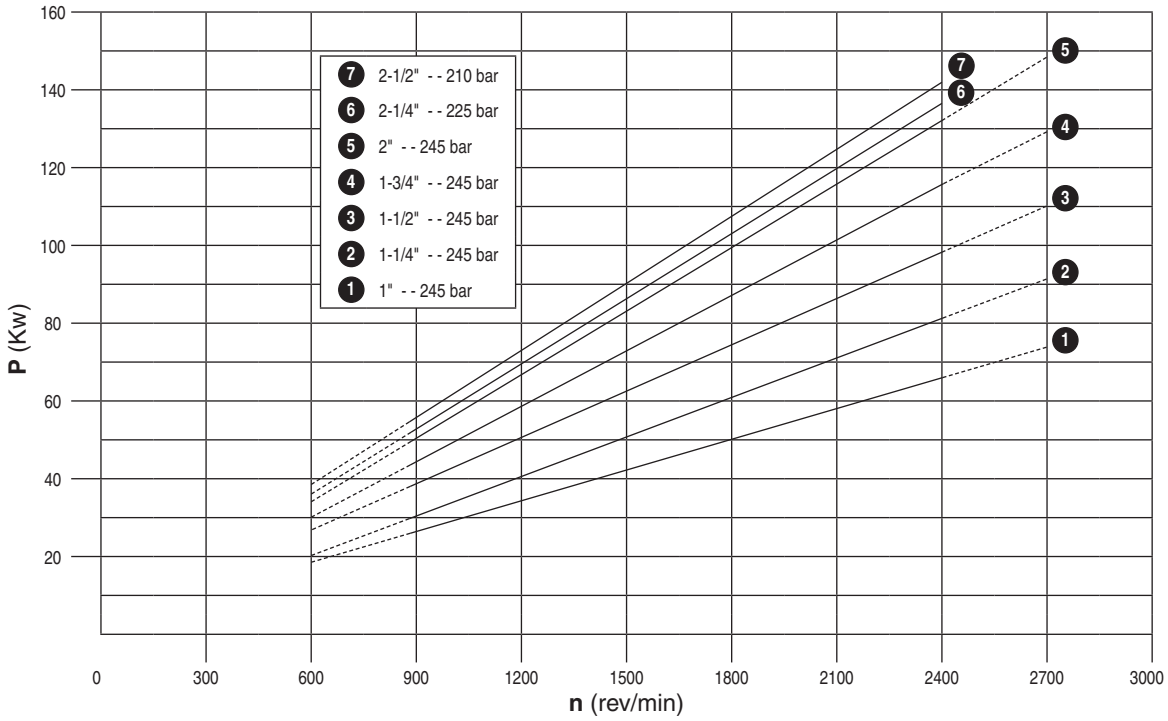
Input



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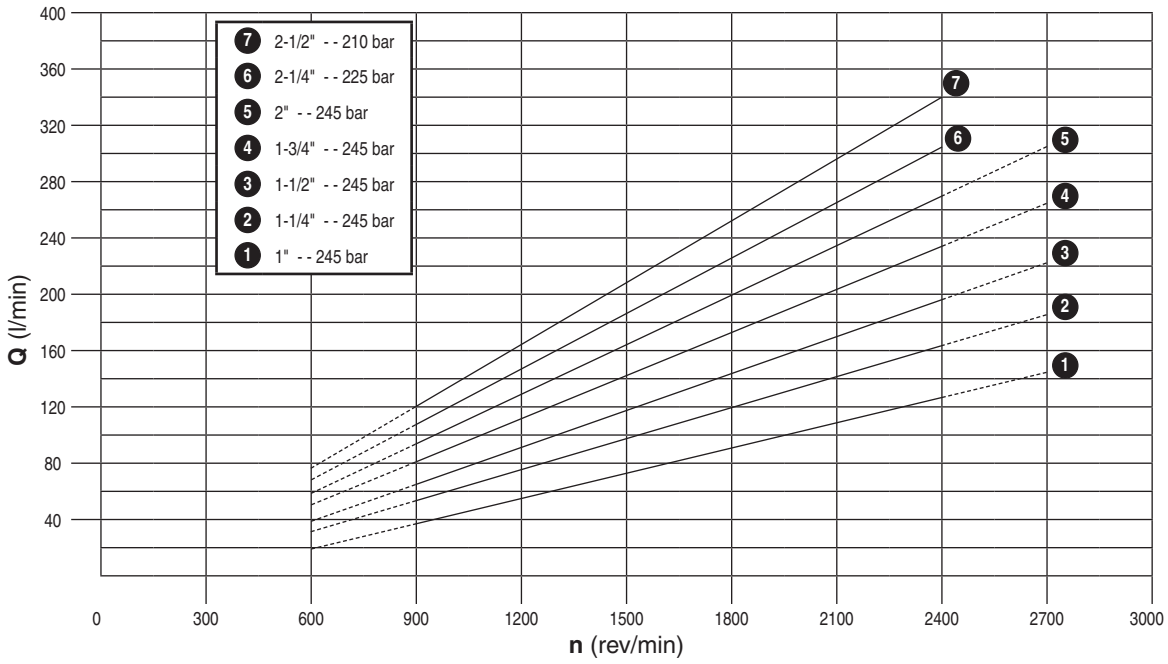

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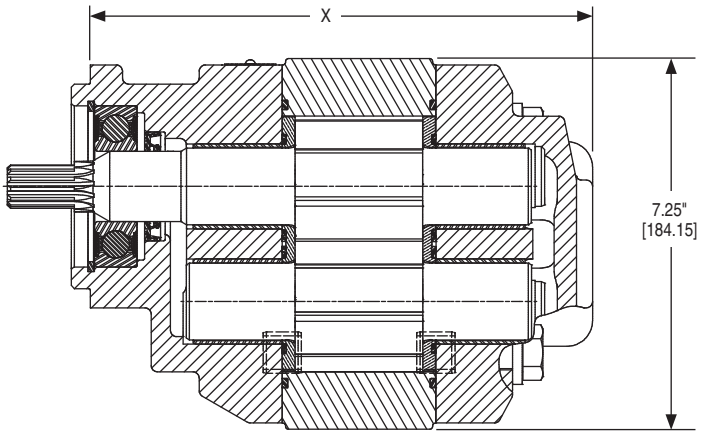
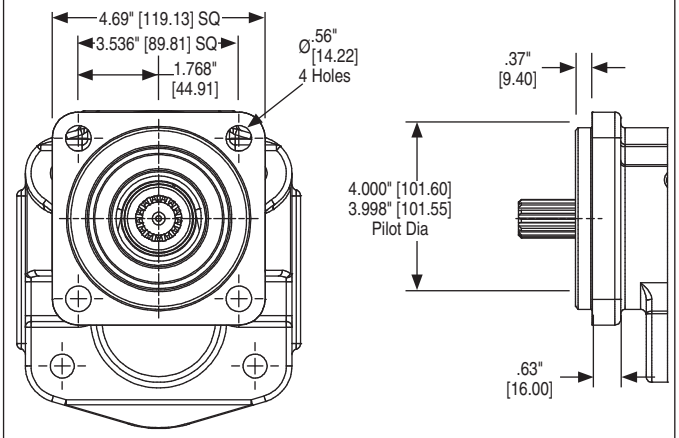
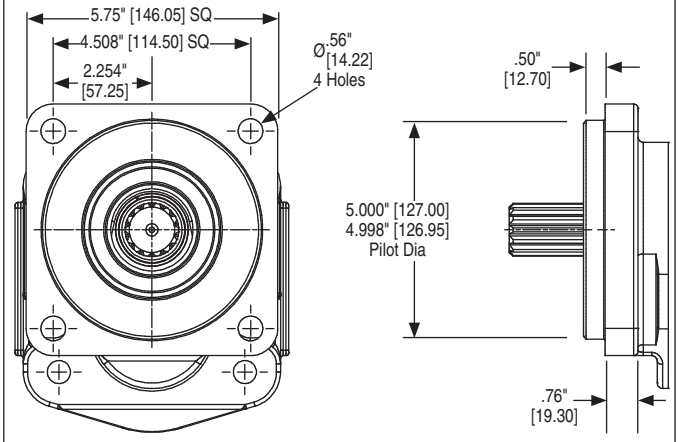


X DIMENSION								
SEC CODE	**07**	**10**	**12**	**15**	**17**	**20**	**22**	**25**
42	8.06" [204.72]	8.31" [211.07]	8.56" [217.42]	8.81" [223.77]	9.06" [230.12]	9.31" [236.47]	9.56" [242.82]	9.81" [249.17]
78	8.06" [204.72]	8.31" [211.07]	8.56" [217.42]	8.81" [223.77]	9.06" [230.12]	9.31" [236.47]	9.56" [242.82]	9.81" [249.17]
97	8.06" [204.72]	8.31" [211.07]	8.56" [217.42]	8.81" [223.77]	9.06" [230.12]	9.31" [236.47]	9.56" [242.82]	9.81" [249.17]
98	8.06" [204.72]	8.31" [211.07]	8.56" [217.42]	8.81" [223.77]	9.06" [230.12]	9.31" [236.47]	9.56" [242.82]	9.81" [249.17]

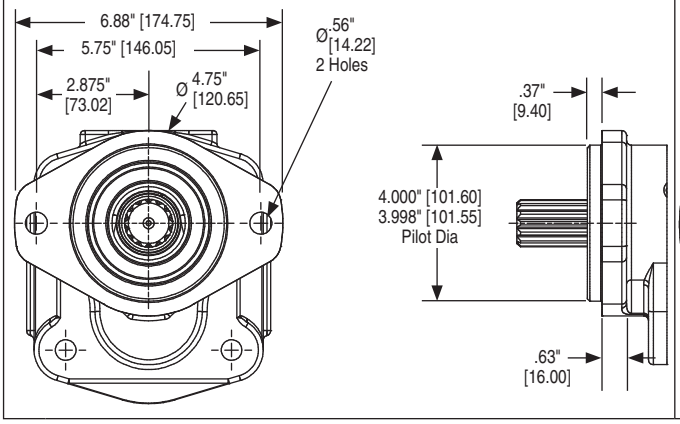
42 **SAE B 4-Bolt**



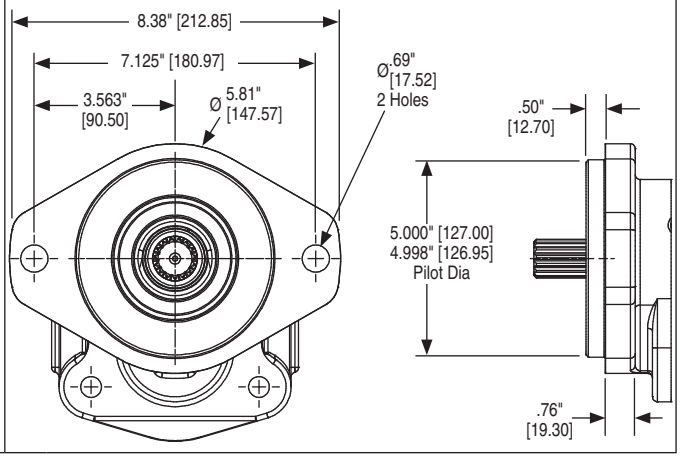
78 **SAE C 4-Bolt**



97 **SAE B 2-Bolt**



98 **SAE C 2-Bolt**



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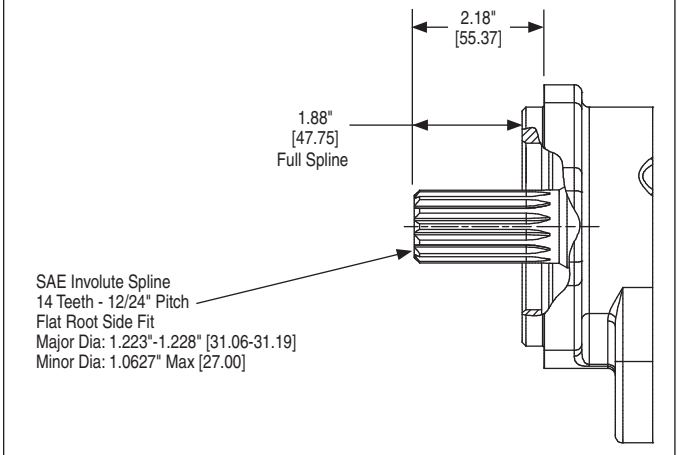
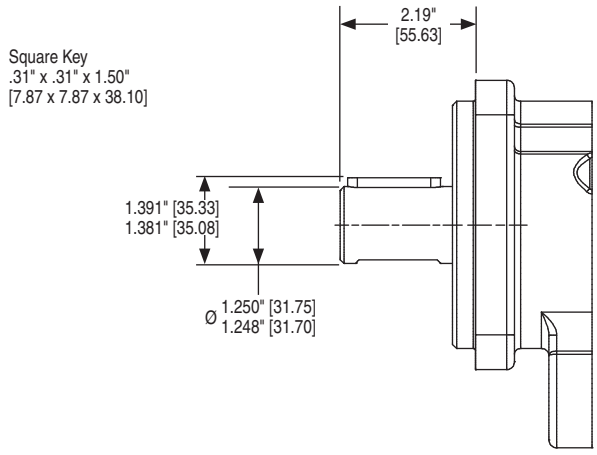
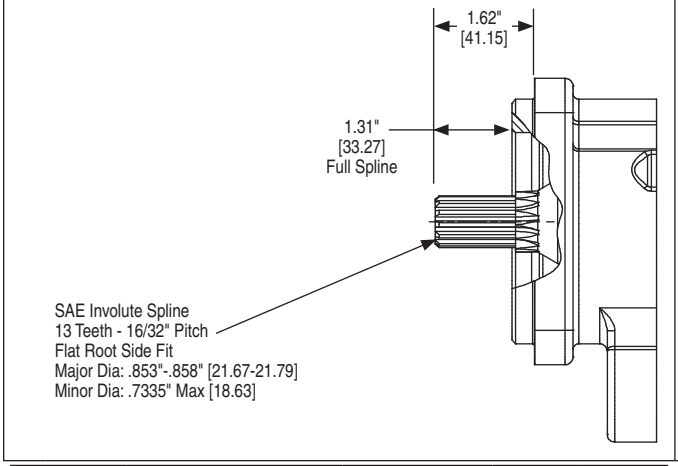
7 SAE C Spline



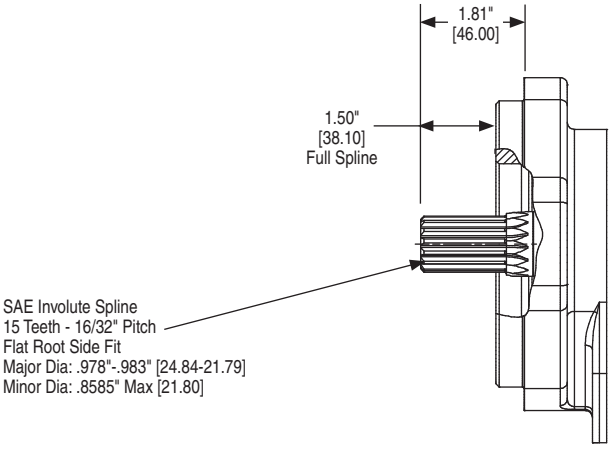
11 SAE C Keyed



25 SAE B Spline



98 SAE BB Spline



Shaft Style		Integral: 1 2 pieces: 2	Maximum Torque	
			lb-ft	Nm
SAE B	Splined - 13 Teeth	1 2	242 242	328 328
	7/8" Keyed	1 2	167 167	226 226
SAE BB	Splined - 15 Teeth	1 2	371 371	503 503
	1" Keyed	1 2	250 250	339 339
SAE C	Splined - 14 Teeth	1 2	708 533	960 723
	1.25" Keyed	1 2	500 500	678 678
Connecting Shaft			533	723

Torque (lb-ft) = $\frac{\text{Pressure (PSI) x Displacement (in}^3\text{/rev)}}{75.4}$

Torque (Nm) = $\frac{\text{Pressure (Bar) x Displacement (cc/rev)}}{62.8}$

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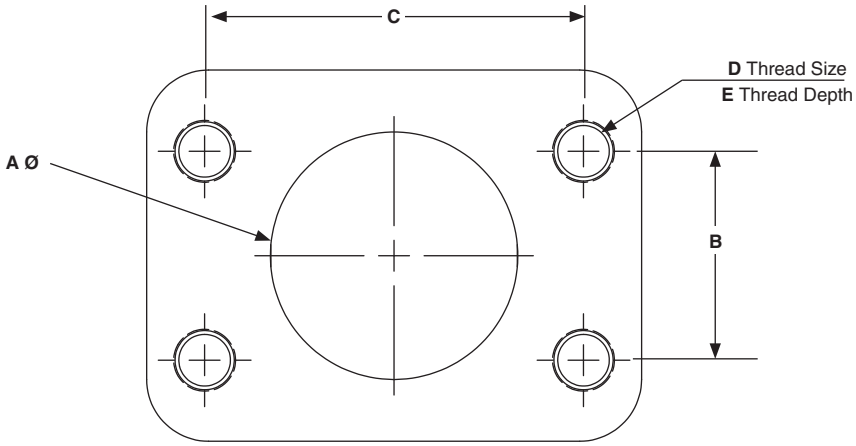
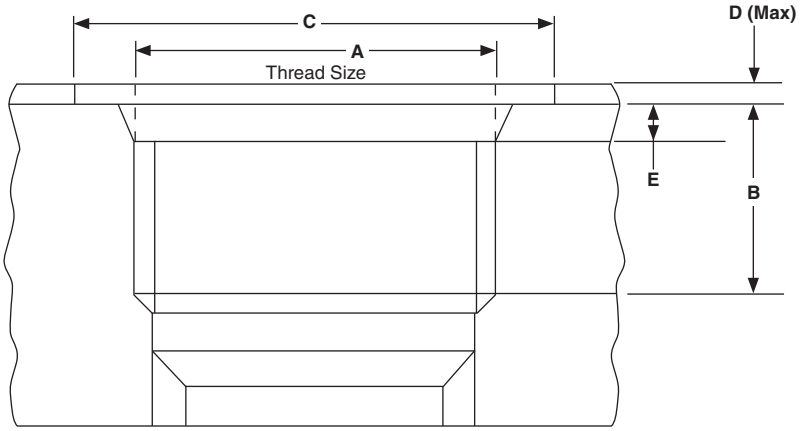
SAE Flanged Ports UNC Thread (SSS)

A		B		C		D	E	
inch	mm	inch	mm	inch	mm	UNC	inch	mm
0.50	12.7	0.69	17.5	1.50	38.1	5/16"-18	0.94	23.9
0.75	19.1	0.88	22.3	1.88	47.7	3/8"-16	0.88	22.4
1.00	25.4	1.03	26.2	2.06	52.2	3/8"-16	0.88	22.4
1.25	31.8	1.19	30.2	2.31	58.7	7/16"-14	1.12	28.4
1.50	38.1	1.41	35.7	2.75	69.9	1/2"-13	1.06	26.9
2.00	50.8	1.69	42.9	3.06	77.8	1/2"-13	1.06	26.9
2.50	63.5	2.00	50.8	3.50	88.9	1/2"-13	1.19	30.2



SAE Straight Thread (ODT)

ODT	A UNF	B		C		D		E	
		inch	mm	inch	mm	inch	mm	inch	mm
1/2"	3/4"-16	.56	14.3	1.19	30.2	.09	2.4	.10	2.55
5/8"	7/8"-14	.66	16.7	1.34	34.1	.09	2.4	.10	2.55
3/4"	1-1/16"-12	.75	19.1	1.62	41.3	.09	2.4	.13	3.30
1"	1-5/16"-12	.75	19.1	1.91	48.5	.09	2.4	.13	3.30
1-1/4"	1-5/8"-12	.75	19.1	2.27	57.7	.09	2.4	.13	3.35
1-1/2"	1-7/8"-12	.75	19.1	2.56	65.0	.09	2.4	.13	3.35
2"	2-1/2"-12	.75	19.1	3.48	88.4	.09	2.4	.13	3.35



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PGP/PGM365 Ordering Code

																	Tandem: Repeat if Necessary						
PG	1	365	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	6	6	7	7	10

Code	1 – Type
P	Pump
M	Motor

Code	2 – Unit
A	Single Unit
B	Tandem Unit (flush studs)
C	Single or Tandem with two-piece shaft (O.B. bearing required)
L	Unit with Extended Studs

Code	3 – Shaft End Cover
1	Pump, cw w/o O.B. bearing
2	Pump, ccw w/o O.B. bearing
4	Pump, cw with O.B. bearing
5	Pump, ccw with O.B. bearing
8	Motor, bi-rot with O.B. bearing + 1/4" ODT drain
9	Motor, bi-rot w/o O.B. bearing + 1/4" ODT drain

Code	4 – Shaft End Cover
42	SAE B 4-Bolt
78	SAE C 4-Bolt
97	SAE B 2-Bolt
98	SAE C 2-Bolt

Code	5 – Port End Cover		
SIDE PORTED			
CW	CCW	IN	OUT
SAE Split Flange (pump)			
EC	CE	2"	1-1/2"
EF	FE	2"	1-1/4"
EG	GE	2"	1"
EH	HE	1-1/2"	1-1/2"
EJ	JE	1-1/2"	1-1/4"
EK	KE	1-1/2"	1"
EL	LE	1-1/4"	1-1/4"
EM	ME	1-1/4"	1"
EN	NE	1"	1"
OE	EO	2"	-
OF	FO	1-1/2"	-
OG	GO	1-1/4"	-
OJ	JO	1"	-
OL	LO	-	1-1/2"
OM	MO	-	1-1/4"
ON	NO	-	1"
SAE Split Flange (motor)			
CR-Double		1-1/2"	1-1/2"
CS-Double		1-1/4"	1-1/4"
CT-Double		1"	1"
CV-Double		3/4"	3/4"
OD Tube Porting (pump)			
FB	BF	1-1/2"	1-1/4"
FC	CF	1-1/2"	1"
FG	GF	1-1/4"	1-1/4"
FJ	JF	1-1/4"	1"
FL	LF	1"	1"
BC	CB	1-1/2"	-
BG	GB	1-1/4"	-
BJ	JB	1"	-
BL	LB	-	1-1/4"
BN	NB	-	1"
OD Tube Porting (motor)			
VC-Double		1-1/4"	1-1/4"
VN-Double		1"	1"
VR-Double		3/4"	3/4"
Unported (pump)			
BI	IB	Unported	
Unported (motor)			
BA		Unported	

Code	6 – Gear Housing
AB	Pump
EB	Motor

Code	7 – Gear Width				
	Gear Width	$in.^3$ /rev.	cm^3 /rev.	Max Pressure	
				psi	bar
07	3/4"	2.70	44.3	3500	241
10	1"	3.60	59.0	3500	241
12	1-1/4"	4.50	73.8	3500	241
15	1-1/2"	5.40	88.5	3500	241
17	1-3/4"	6.30	103.3	3500	241
20	2"	7.20	118.0	3500	241
22	2-1/4"	8.10	132.8	3250	224
25	2-1/2"	9.00	147.5	3000	207

Code	8 – Shaft Type
7	SAE C Spline
11	SAE C Keyed
25	SAE B Spline
98	SAE BB Splined (two-piece only)
For Single or Tandem Units - unless noted	

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																Tandem: Repeat if Necessary						
PG	1	365	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	6	6	7	7	10

Code	9 – Bearing Carriers			
DUAL OUTLET - PUMP ONLY				
Outlets: for clockwise porting the top port number comes first; for counter-clockwise porting the bottom port number comes first				
CW	**CCW**	**IN**	**OUT**	
SAE Split Flange				
AC	**CA**	2-1/2"	1-1/2"	1-1/2"
AD	**DA**	2-1/2"	1-1/2"	1-1/4"
AE	**EA**	2-1/2"	1-1/2"	1"
AF	**FA**	2-1/2"	1-1/4"	1-1/4"
AG	**GA**	2-1/2"	1-1/4"	1"
AH	**HA**	2-1/2"	1"	1"
AJ	**JA**	2"	1-1/2"	1-1/2"
AK	**KA**	2"	1-1/2"	1-1/4"
AL	**LA**	2"	1-1/2"	1"
AM	**MA**	2"	1-1/4"	1-1/4"
AN	**NA**	2"	1-1/4"	1"
AP	**PA**	2"	1"	1"
AQ	**QA**	1-1/2"	1-1/2"	1-1/2"
AR	**RA**	1-1/2"	1-1/2"	1-1/4"
AS	**SA**	1-1/2"	1-1/2"	1"
AT	**TA**	1-1/2"	1-1/4"	1-1/4"
AU	**UA**	1-1/2"	1-1/4"	1"
AV	**VA**	1-1/2"	1"	1"
AW	**WA**	1-1/4"	1-1/4"	1-1/4"
AX	**XA**	1-1/4"	1-1/4"	1"
AY	**YA**	1-1/4"	1"	1"
AZ	**ZA**	1"	1"	1"
OD Tube Porting				
GJ	**JG**	2"	1-1/2"	1-1/2"
GK	**KG**	2"	1-1/2"	1-1/4"
GL	**LG**	2"	1-1/2"	1"
GM	**MG**	2"	1-1/4"	1-1/4"
GN	**NG**	2"	1-1/4"	1"
GP	**PG**	2"	1"	1"
GQ	**QG**	1-1/2"	1-1/2"	1-1/2"
GR	**RG**	1-1/2"	1-1/2"	1-1/4"
GS	**SG**	1-1/2"	1-1/2"	1"
GT	**TG**	1-1/2"	1-1/4"	1-1/4"
GU	**UG**	1-1/2"	1-1/4"	1"
GV	**VG**	1-1/2"	1"	1"
GW	**WG**	1-1/4"	1-1/4"	1-1/4"
GX	**XG**	1-1/4"	1-1/4"	1"
GY	**YG**	1-1/4"	1"	1"
GZ	**ZG**	1"	1"	1"

* Outlet port for rear section

Code	9 – Bearing Carriers (cont.)		
SINGLE OUTLET - PUMP ONLY			
Outlet for front section			
CW	**CCW**	**IN**	**OUT**
SAE Split Flange			
CJ	**JC**	2-1/2"	1-1/2"
CL	**LC**	2-1/2"	1-1/4"
CM	**MC**	2-1/2"	1"
HB	**BH**	2"	1-1/2"
HC	**CH**	2"	1-1/4"
HF	**FH**	2"	1"
HL	**LH**	1-1/2"	1-1/2"
HM	**MH**	1-1/2"	1-1/4"
HN	**NH**	1-1/2"	1"
HO	**OH**	1-1/4"	1-1/4"
HP	**PH**	1-1/4"	1"
HQ	**QH**	1"	1"
NR	**RN**	2-1/2"	1-1/2"
RS	**SR**	1-1/4"	1"
OD Tube Porting			
KB	**BK**	2"	1-1/2"
KC	**CK**	2"	1-1/4"
KF	**FK**	2"	1"
KL	**LK**	1-1/2"	1-1/2"
KM	**MK**	1-1/2"	1-1/4"
KN	**NK**	1-1/2"	1"
KO	**OK**	1-1/4"	1-1/4"
KP	**PK**	1-1/4"	1"
KQ	**QK**	1"	1"

* Outlet port for rear section

Code	9 – Bearing Carriers (cont.)		
COMBINED OUTLET			
Outlet for front section			
CW	**CCW**	**IN**	**OUT**
SAE Split Flange (pump)			
UC	**CU**	2-1/2"	1-1/2"
UF	**FU**	2-1/2"	1-1/4"
UN	**NU**	2"	1-1/2"
UO	**OU**	2"	1-1/4"
UP	**PU**	1-1/2"	1-1/2"
UQ	**QU**	1-1/2"	1-1/4"
UR	**RU**	1-1/4"	1-1/4"
SAE Split Flange (motor)			
AA-Double		2"	2"
BB-Double		1-1/2"	1-1/2"
CC-Double		1-1/4"	1-1/4"
EE-Double		1"	1"
FF-Double		3/4"	3/4"
OD Tube Porting (pump)			
PE	**EP**	2"	1-1/2"
PM	**MP**	2"	1-1/4"
PN	**NP**	1-1/2"	1-1/2"
PQ	**QP**	1-1/2"	1-1/4"
PR	**RP**	1-1/4"	1-1/4"
OD Tube Porting (motor)			
MM-Double		1-1/2"	1-1/2"
NN-Double		1-1/4"	1-1/4"
QQ-Double		1"	1"
RR-Double		3/4"	3/4"

Code	10 – Connecting Shaft
1	Connecting Shaft
For connecting tandem units	

WARNING: This product can expose you to chemicals including lead or DEHP which are known to the state of California to cause cancer, birth defects, and other reproductive harm. www.p65warnings.ca.gov