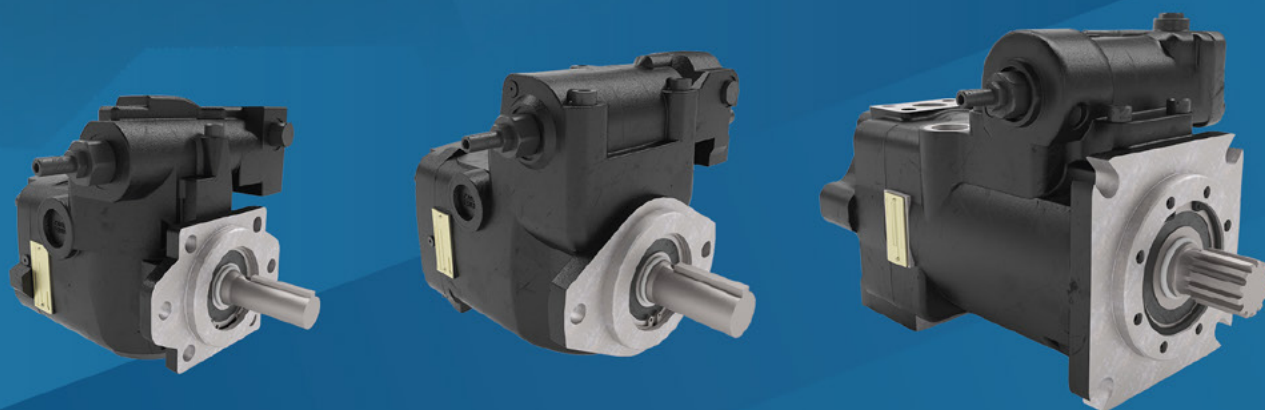


THE WORLD DEMANDS
OILGEAR

PVG PUMPS

High performance in
medium & heavy duty
applications



MAKING MACHINES GO AND PROBLEMS GO AWAY®

910005

OILGEAR

**MAKING MACHINES GO
AND PROBLEMS GO AWAY®**

THE WORLD DEMANDS OILGEAR

Oilgear has a rich legacy of more than 100 years manufacturing pumps and hydraulic equipment. We pride ourselves on **MAKING MACHINES GO AND PROBLEMS GO AWAY®**. For decades, Oilgear has developed hydraulic techniques to meet the unique needs for many equipment manufacturers and end users worldwide.



**OILGEAR
TRAVERSE CITY, MI USA**



**OILGEAR
FREMONT, NE USA**



**OILGEAR TOWLER
UK**



**OILGEAR
SOUTH KOREA**



**OILGEAR
CHINA**



**OILGEAR
SPAIN**

Global Service Network

No matter where you are, Oilgear can quickly and efficiently provide service to you.

Oilgear's large pump manufacturing centers are in Traverse City, Michigan and Leeds, England. Further domestic manufacturing capacity and product specialization are provided by our Fremont, Nebraska, pump manufacturing facility. We also have manufacturing and field service centers in Germany, France, Spain, China and Korea.

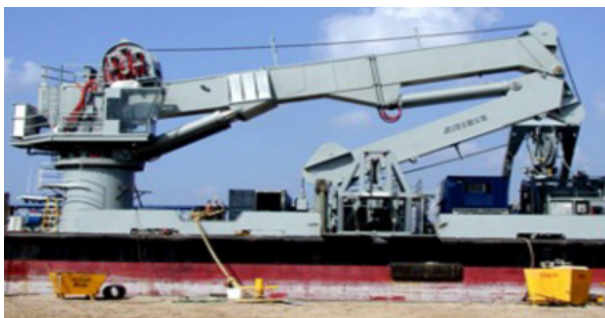
Engineering and Application Expertise

Oilgear's engineering capabilities are second to none. Our application and field engineers are factory-trained and have spent years, often decades, working in the market segments they service. Every Oilgear engineer brings this personal experience to the meeting table, plus the collective knowledge gained from Oilgear's more than 100 years of servicing the general industry with innovative fluid power solutions.



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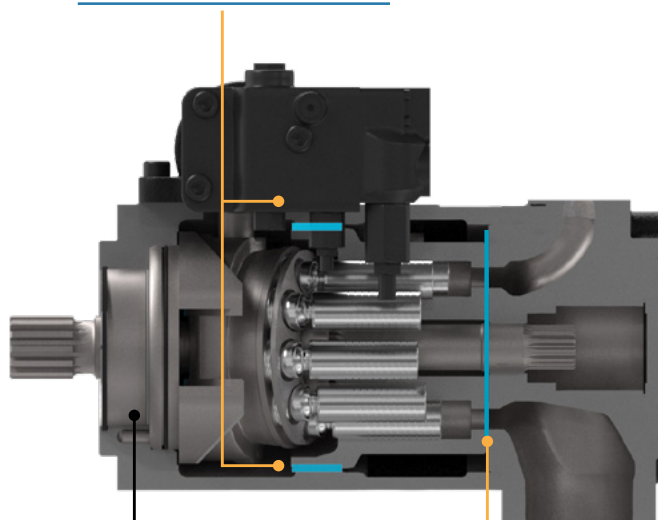


PVG FAMILY | PROVEN ROBUSTNESS, BETTER RELIABILITY!

Improved Speed and Flow Performance

PVG takes the best industrial pump ideas from PVWJ, and builds on them with a 4-way control, heavy-duty rotating groups, and next-generation control modules.

HYDRODYNAMIC BEARING



SAE HEAVY-DUTY SHAFT AND WITH SEALED BEARINGS

HARDENED RUNNING SURFACES

■ **ULTIMATE RELIABILITY**

Modular design ensures PVG offers customer the solutions they need. Shafts can be replaced without disassembling the pump. Control modules are interchangeable.

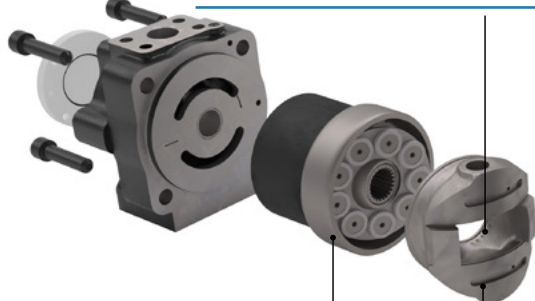
■ **ULTIMATE LONGEVITY**

Hard-on-Hard technology, Hydrobearing support, and a 4-way control piston combine in PVG to offer our customers the ultimate in rugged reliability.

■ **ULTIMATE PERFORMANCE**

A 4-way control helps PVG shift quickly, and follow its control signal accurately. Years of diligent design development creates a PVG line that operates efficiently, even at 5,000 psi.

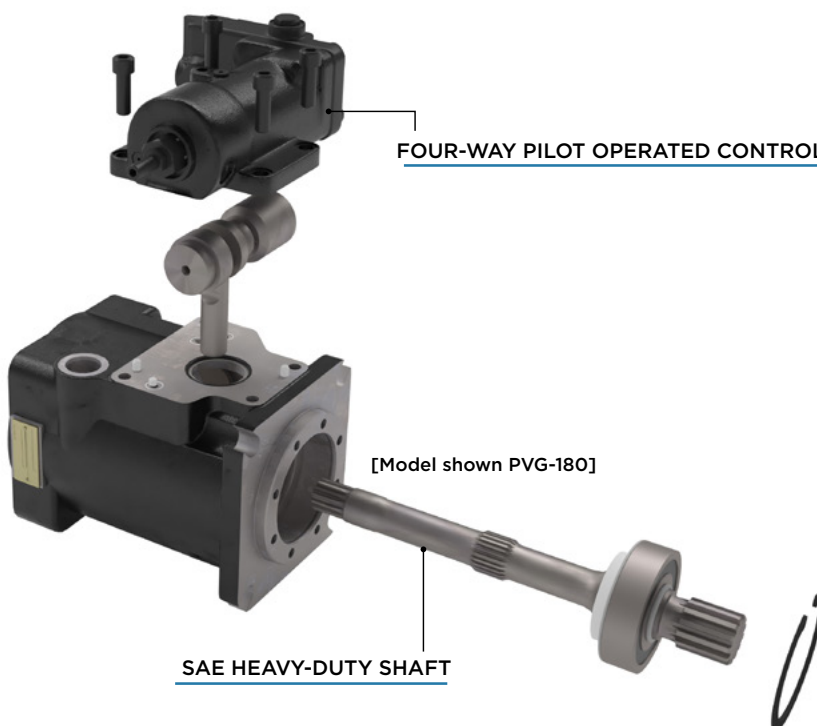
"HARD-ON-HARD" TECHNOLOGY



RUGGED CYLINDER DESIGN

HARDENED STEEL SHOES

FOUR-WAY PILOT OPERATED CONTROL



SAE HEAVY-DUTY SHAFT



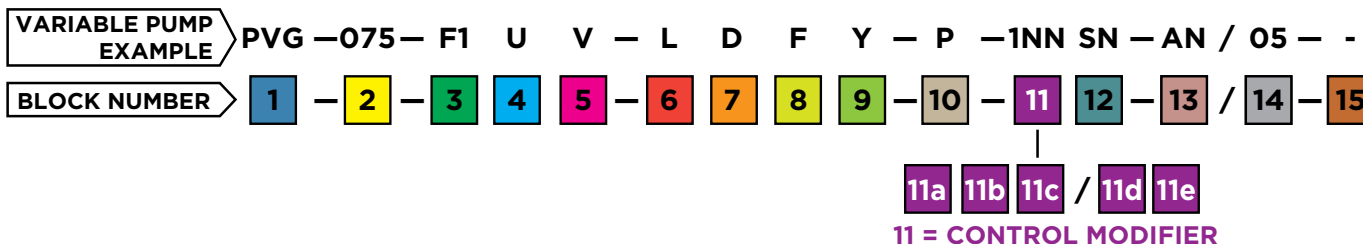
PVG FAMILY SPECIFICATIONS

FRAME SIZE MODEL		B-FRAME			C-FRAME		D-FRAME	
		PVG-048	PVG-065	PVG-075	PVG-100	PVG-130	PVG-150	PVG-180
DRIVE	Maximum (RPM)		2700	2700	2700	2400	2400	2400
	Minimum (RPM)		600	600	600	600	600	600
	Torque to turn shaft (ft. lbs.)		9	9	9	24	24	40
	Rotational Moment of Inertia (lbs.-in ²)		21	21	21	50	47	150
OUTPUT ¹	Pressure (PSIA)	Peak	5800	5800	4250	5800	4250	5800
		Continuous	5000	5000	3750	5000	3750	5000
		Minimum	100	100	100	100	100	100
	Nominal Volume (GPM) at 1800 RPM and Rated Pressure For Full Displacement		21.1	28.8	33.3	42.4	57.6	63.0
CASE ²	Maximum Pressure (PSI) w/ Standard Shaft Seal		25	25	25	25	25	25
	Minimum Drain Line Hose Size		#16 SAE	#16 SAE	#16 SAE	#16 SAE	#16 SAE	#16 SAE
CONTROLS ³	Minimum Pressure (PSI)	Pressure Controls - Minimum Compensator Setting	200	200	200	200	200	250
		Volume Controls (VS, VM) - Minimum Pilot Pressure	500	500	500	500	500	800
	Maximum Pilot Pressure (PSI)	Volume Control - VS	600	600	600	600	600	N/A
		Volume Control - VM	1000	1000	1000	1000	1000	1000
	Stroking Rate (MSEC) at Rated Pressure, Pressure Controls (Minimum)	On Stroke	40	40	40	40	40	45
		Off Stroke	50	50	50	50	50	60
	Volume Controls (VS, VM)	On Stroke	250	250	250	250	250	250
		Off Stroke	250	250	250	250	250	250
FLUID ⁴	Viscosity (SSU)	Minimum	65	65	65	65	65	65
		Maximum	2000	2000	2000	2000	2000	2000
TEMPERATURE ⁵	Fluid Operating Range (F°)		14 to 190	14 to 190	14 to 190	14 to 190	14 to 190	14 to 190
	Fluid Minimum Starting (F°)		-40	-40	-40	-40	-40	-40
	Fluid Maximum at Case Drain Port (F°)		230	230	230	230	230	230

1. Pumps should not be run at neutral for more than 30 consecutive minutes. For longer times, a 10% minimum stroke should be maintained.
2. Consult Oilgear Technical Sales for higher pressures.
3. Fastest possible time, stroking times may be slower depending on conditions. Consult Oilgear Technical Sales.
4. See "Additional Notes" in Technical Bulletin 847019-C for filtration and contamination levels.
5. Minimum and maximum viscosities must be observed.

PVG | MODEL ORDERING INFORMATION

B-FRAME: PVG -048, -065, -075



1 = UNIT, TYPE & DESIGN SERIES	
PVG	PVG Variable Displacement Pump

2 = UNIT TYPE	
048	48 ml/rev. (2.93 cipr)
065	65 ml/rev. (3.96 cipr)
075	75 ml/rev. (4.60 cipr)

3 = DESIGN SERIES	
F1	Current for all displacement

4 = DESIGN SERIES MODIFIER	
U	SAE Connections & Mounting

5 = SEALS	
V	Viton (Standard)
B	Buna Nitrile
P	EPR

6 = ROTATION	
L	Left Hand (CCW)
R	Right Hand (CW)

7 = VALVE PLATE TYPE	
G	Side Ported
D	Side Ported (thru-shaft)
S	Rear Ported

8 = CONNECTION TYPE	
F	SAE Flange

9 = INPUT SHAFT TYPE	
Y	25-1 (SAE B-B Keyed)
S	25-4 (SAE B-B Spline)
K	22-4 (SAE B Spline)

10 = CONTROL TYPE	
P	Pressure Compensating

11a = CONTROL OPTIONS	
1	Single Setting
E	Electronic Displacement N.O. ①
F	Electronic Displacement N.C. ①

11b = SOLENOID VOLTAGE	
N	Non-Electrical Control
4	12 VDC Mobile with DT04-2P ③
5	24 VDC Mobile with DT04-2P ③

11c = CONNECTOR	
N	Non-electrical Control
S	PG-11 without Lite ③

11d = MODULE	
Blank unless required option	
F	Load Sense ① ②
G	Load Sense w/ Power Limiter ① ② ③
H	Power Limiter ① ② ③
K	Load Sense + ① ②
L	Load Sense + w/ Power Limiter ① ② ③

11e = INPUT HORSEPOWER @ 1800 RPM	
Blank unless required option	
Example: 070 = 70 HP Input	

LEGEND	
①	Not available with Seal Types "B" or "P"
②	Not Available with Control Option "E" or "F"
③	Only available with Control Option "E" or "F"
④	Not Available with Unit Size "048"

*S Connector for Type E control comes with Oilgear connector amplifier

12 = VOLUME STOPS	
NN	No Volume Stop
SN	Adjustable Maximum Volume Stop

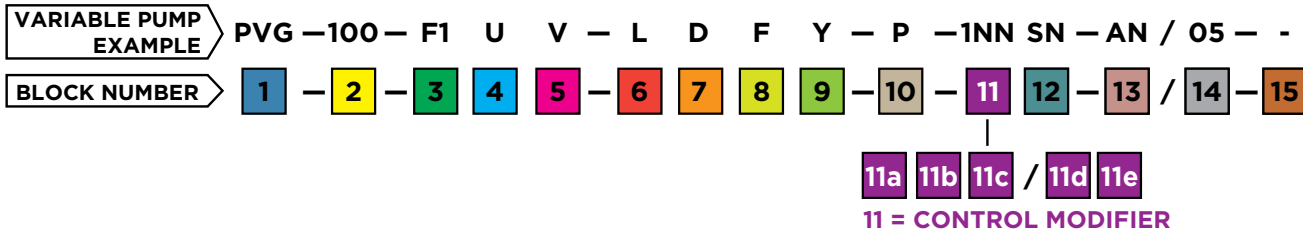
13 = AUXILIARY ADAPTERS	
Required for all thru-shaft units	
Blank for all non-thru-shaft units	
AN	82-2 (SAE A 2-Bolt) Adapter & 16-4 (SAE A) Coupling
BN	101-2 (SAE B 2-Bolt) Adapter & 22-4 (SAE B) Coupling
CP	Cover Plate
NN	None

14 = GEAR PUMPS	
Blank unless required option	
05	8 ml/rev. (0.488 cipr) ①
07	11 ml/rev. (0.671 cipr) ①
10	16 ml/rev. (0.976 cipr) ①
14	23 ml/rev. (1.404 cipr) ①
20	33 ml/rev. (2.014 cipr) ①

15 = SPECIAL PUMP MOD	
Assigned by factory if necessary	

For non-standard requests, please contact technical sales.

C-FRAME: PVG-100, -130



1 = UNIT, TYPE & DESIGN SERIES	
PVG	PVG Variable Displacement Pump

2 = UNIT TYPE	
100	100 ml/rev. (6.00 cipr)
130	130 ml/rev. (7.94 cipr)

3 = DESIGN SERIES	
F1	Current for all displacements

4 = DESIGN SERIES MODIFIER	
U	SAE Connections & Mounting

5 = SEALS	
V	Viton (Standard)
B	Buna Nitrile
P	EPR

6 = ROTATION	
L	Left Hand (CCW)
R	Right Hand (CW)

7 = VALVE PLATE TYPE	
G	Side Ported
D	Side Ported (thru-shaft)
S	Rear Ported

8 = CONNECTION TYPE	
F	SAE Flange

9 = INPUT SHAFT TYPE	
Y	38-1 (SAE C-C Keyed)
G	38-1 (SAE C-C Keyed), 1" Shorter than "Y"
S	38-4 (SAE C-C Spline)
K	32-4 (SAE C Spline)

10 = CONTROL TYPE	
P	Pressure Compensating
V	Electrohydraulic (with feedback)

For Control Type P

11a = CONTROL OPTIONS	
1	Single Setting (Standard)
2	Dual Setting ①
C	Single PC w/ Soft Start, N.O. ①
E	Electronic Displacement, N.O. ①
F	Electronic Displacement, N.C. ①

11b = SOLENOID VOLTAGE	
N	Non-electrical Control Options
O	115/60 - 110/50 VAC ③
3	24 VDC ③
4	12 VDC Mobile with DT04-2P ④
5	24 VDC Mobile with DT04-2P ④

11c = CONNECTOR	
N	Non-electrical Control Options or No Connector
W	1/2" NPT w/Lite ③
S	PG-11 w/o Lite ④
L	PG-11 w/Lite ③

11d = MODULE	
Blank unless required option	
F	Load Sense ②
G	Load Sense with Horsepower Limiter ①②③
H	Horsepower Limiter ①③
K	Load Sense Plus ②
L	Horsepower Limiter with Load Sense Plus ①②③

11e = INPUT HORSEPOWER @ 1800 RPM	
Blank unless required option	
Example: 070 = 70 HP Input	

For Control Type V

11a = TYPE	
M	Single Stage ①
S	Two Stage ①
11b = SIZE	
20	Servo Valve Size 20 (Type M) ①
25	Servo Valve Size 25 (Type S) ①

LEGEND	
①	Not available with Seal Types "B" or "P"
②	Not Available with Control Option "2" or "C"
③	Not Available with Control Option "2" or "C"
④	Only available with Control Option "E" or "F"
⑤	Required with Control Type "V"
⑥	Not Available with Control Type "V"
⑦	Only available with Valve Plate Type "D"

*S Connector for Type E control comes with Oilgear connector amplifier

12 = VOLUME STOPS	
NN	No Volume Stop
SA	Volume Stop, Type "V" Controls Only ⑥
SN	Adjustable Maximum Volume Stop, Not Available on Type V Controls ⑤

13 = AUXILIARY ADAPTERS	
Required for all thru-shaft units	
Blank for all non-thru-shaft units	
AN	82-2 (SAE A 2-Bolt) Adapter & 16-4 (SAE A) Coupling
BB	101-2 (SAE B 2-Bolt) Adapter & 25-4 (SAE B-B) Coupling
BN	101-2 (SAE B 2-Bolt) Adapter & 22-4 (SAE B) Coupling
CN	127-2 (SAE C 2-Bolt) Adapter & 32-4 (SAE C) Coupling
CP	Cover Plate
NN	None

14 = GEAR PUMPS	
Blank unless required option	
05	8 ml/rev. (0.488 cipr)
07	11 ml/rev. (0.671 cipr)
10	16 ml/rev. (0.976 cipr)
14	23 ml/rev. (1.404 cipr)
20	33 ml/rev. (2.014 cipr)

15 = SPECIAL PUMP MOD	
Assigned by factory if necessary	

For non-standard requests, please contact technical sales.

PVG | MODEL ORDERING INFORMATION

D-FRAME: PVG-150, -180

VARIABLE PUMP
EXAMPLE PVG -100- F1 U V - L D F Y - P -1NN SN -AN / 05 - -

BLOCK NUMBER 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 / 14 - 15

11a 11b 11c / 11d 11e

11 = CONTROL MODIFIER

1 = UNIT, TYPE & DESIGN SERIES	
PVG	PVG Variable Displacement Pump

2 = UNIT TYPE	
150	150 ml/rev. (9.16 cipr)
180	180 ml/rev. (10.98 cipr)

3 = DESIGN SERIES	
A1	Current for all displacements

4 = DESIGN SERIES MODIFIER	
U	SAE Connections & Mounting

5 = SEALS	
V	Viton (Standard)
B	Buna Nitrile
P	EPR

6 = ROTATION	
L	Left Hand (CCW)
R	Right Hand (CW)

7 = VALVE PLATE TYPE	
G	Side Ported
D	Side Ported (thru-shaft)

8 = CONNECTION TYPE	
F	SAE Flange

9 = INPUT SHAFT TYPE	
Y	38-1 (SAE C-C Keyed)
S	38-4 (SAE C-C Spline)

10 = CONTROL TYPE	
P	Pressure Compensating
V	Electrohydraulic (with feedback)

For Control Type P

11a = CONTROL OPTIONS	
1	Single Setting (Standard)
C	Single PC w/ Soft Start, N.O. ①
E	Electronic Displacement, N.O. ①
F	Electronic Displacement, N.C. ①

11b = SOLENOID VOLTAGE	
N	Non-electrical Control Options
0	115/60 - 110/50 VAC ③
3	24 VDC ③
4	12 VDC Mobile with DT04-2P ④
5	24 VDC Mobile with DT04-2P ④

11c = CONNECTOR	
N	Non-electrical Control
W	1/2" NPT w/Lite ③
S	PG-11 w/o Lite ④
L	PG-11 w/Lite ③

11d = MODULE	
Blank unless required option	
F	Load Sense ②
G	Load Sense with Power Limiter ①②③⑦
H	Power Limiter ①③⑦
K	Load Sense Plus ②
L	Load Sense Plus with Power Limiter ①②③⑦

11e = INPUT HORSEPOWER @ 1800 RPM	
Blank unless required option	
Example: 070 = 70 HP Input ⑦	

For Control Type V

11a = TYPE	
M	Single Stage ①
S	Two Stage ①

*S Option is not available for PVG-180

11b = SIZE	
20	Servo Valve Size 20 (Type M) ①
25	Servo Valve Size 25 (Type S) ①

LEGEND

- ① Not available with Seal Types "B" or "P"
- ② Not Available with Control Option "2" or "C"
- ③ Not Available with Control Option "2" or "C"
- ④ Only available with Control Option "E" or "F"
- ⑤ Required with Control Type "V"
- ⑥ Not Available with Control Type "V"
- ⑦ Only available with Valve Plate Type "D"

*S Connector for Type E control comes with Oilgear connector amplifier

12 = VOLUME STOPS	
NN	No Volume Stop
SN	Adjustable Max. Volume Stop ⑥
SA	Adjustable Min Volume Stop ⑤

13 = AUXILIARY ADAPTERS	
Required for all thru-shaft units	
Blank for all non-thru-shaft units	
A2	82-2 (SAE A 2-Bolt) Adapter & 16-4 (SAE A) Coupling
B2	101-2 (SAE B 2-Bolt) Adapter & 22-4 (SAE B) Coupling
C2	127-2 (SAE C 2-Bolt) Adapter & 32-4 (SAE C) Coupling
C4	127-4 (SAE C 4-Bolt) Adapter & 32-4 (SAE C) Coupling
D4	152-4 (SAE D 4-Bolt) Adapter & 44-4 (SAE D) Coupling
NN	Cover Plate
CP	None

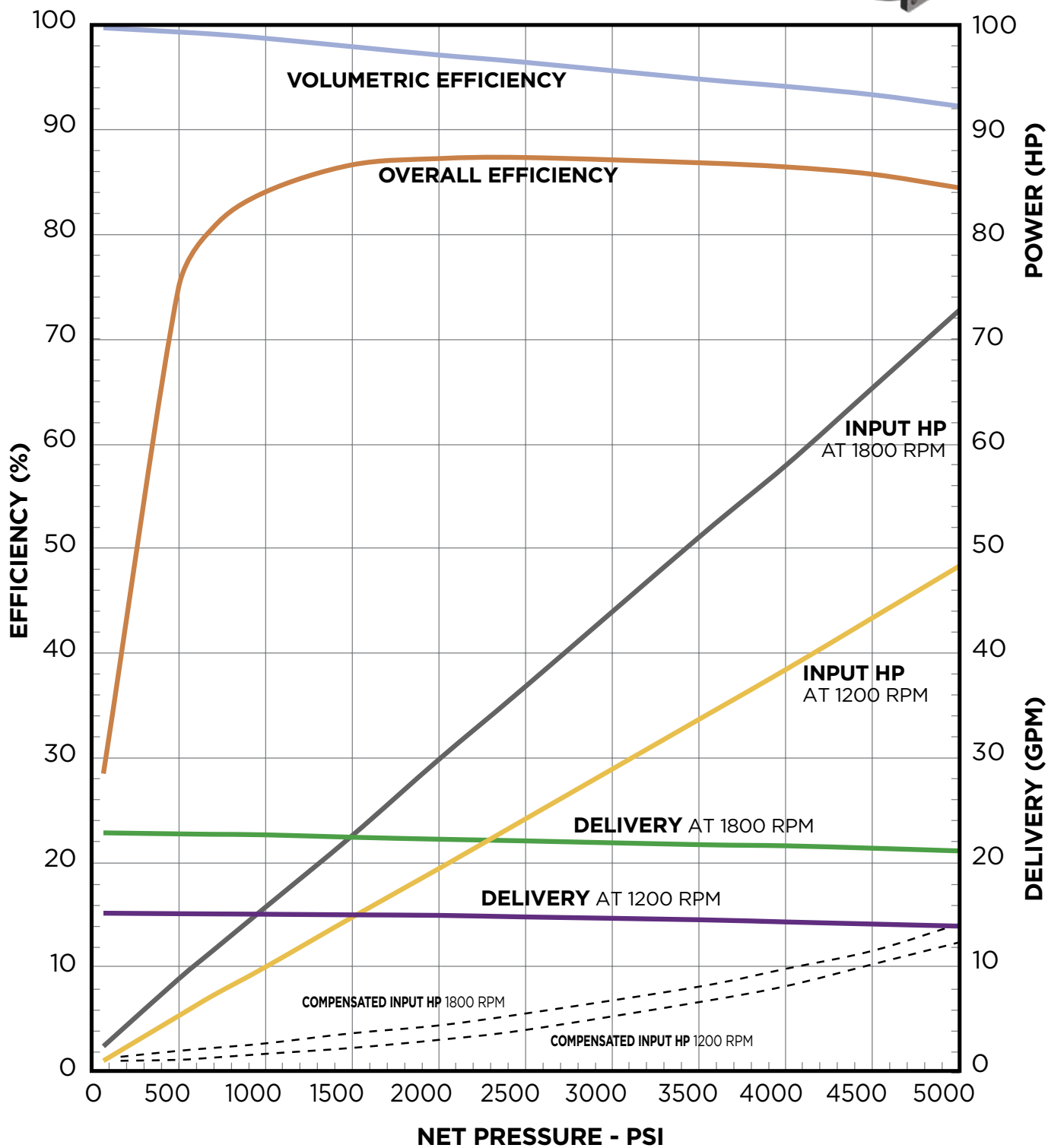
14 = GEAR PUMPS	
Blank unless required option	
05	8 ml/rev. (0.488 cipr)
07	11 ml/rev. (0.671 cipr)
10	16 ml/rev. (0.976 cipr)
14	23 ml/rev. (1.404 cipr)
20	33 ml/rev. (2.014 cipr)

15 = SPECIAL PUMP MOD	
Assigned by factory if necessary	

For non-standard requests, please contact technical sales.

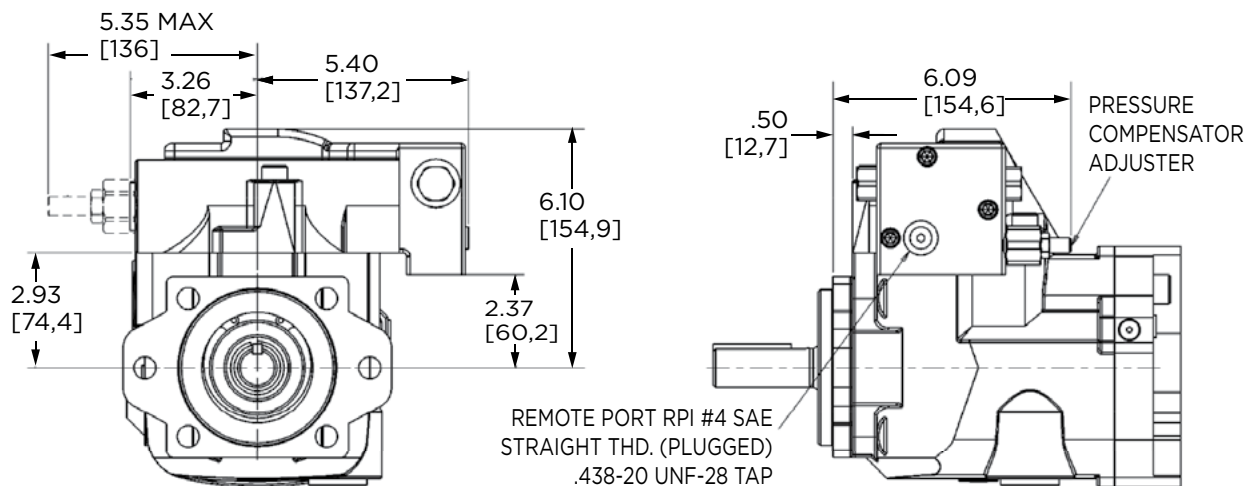
PVG-048 | DISPLACEMENT: 48 CC/REV

PERFORMANCE DATA

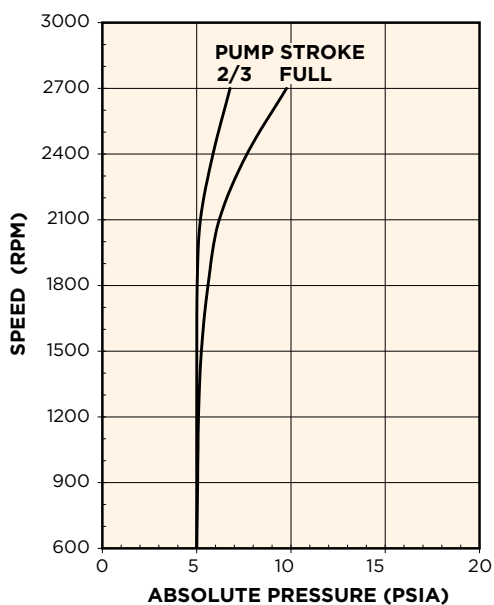


PVG-048 | DISPLACEMENT: 48 CC/REV

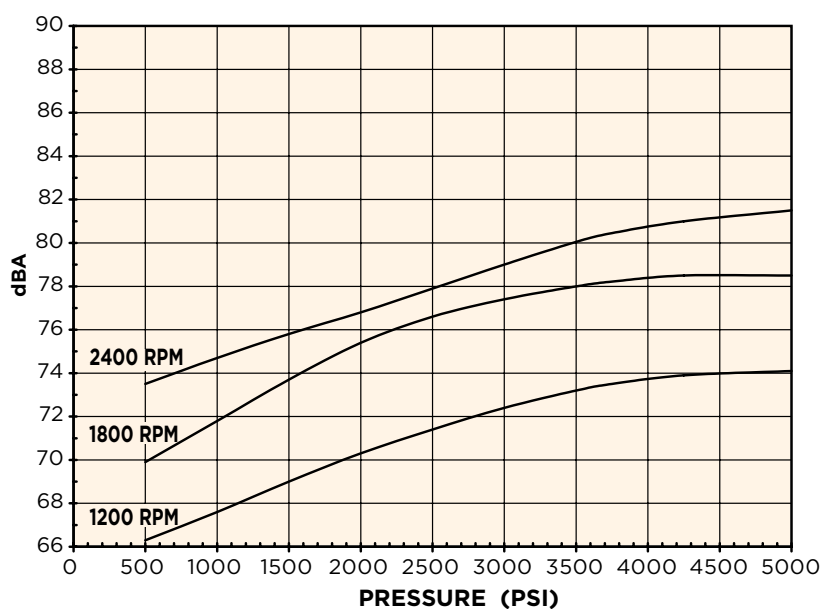
DIMENSIONS Inches [mm]



INLET DATA



SOUND DATA





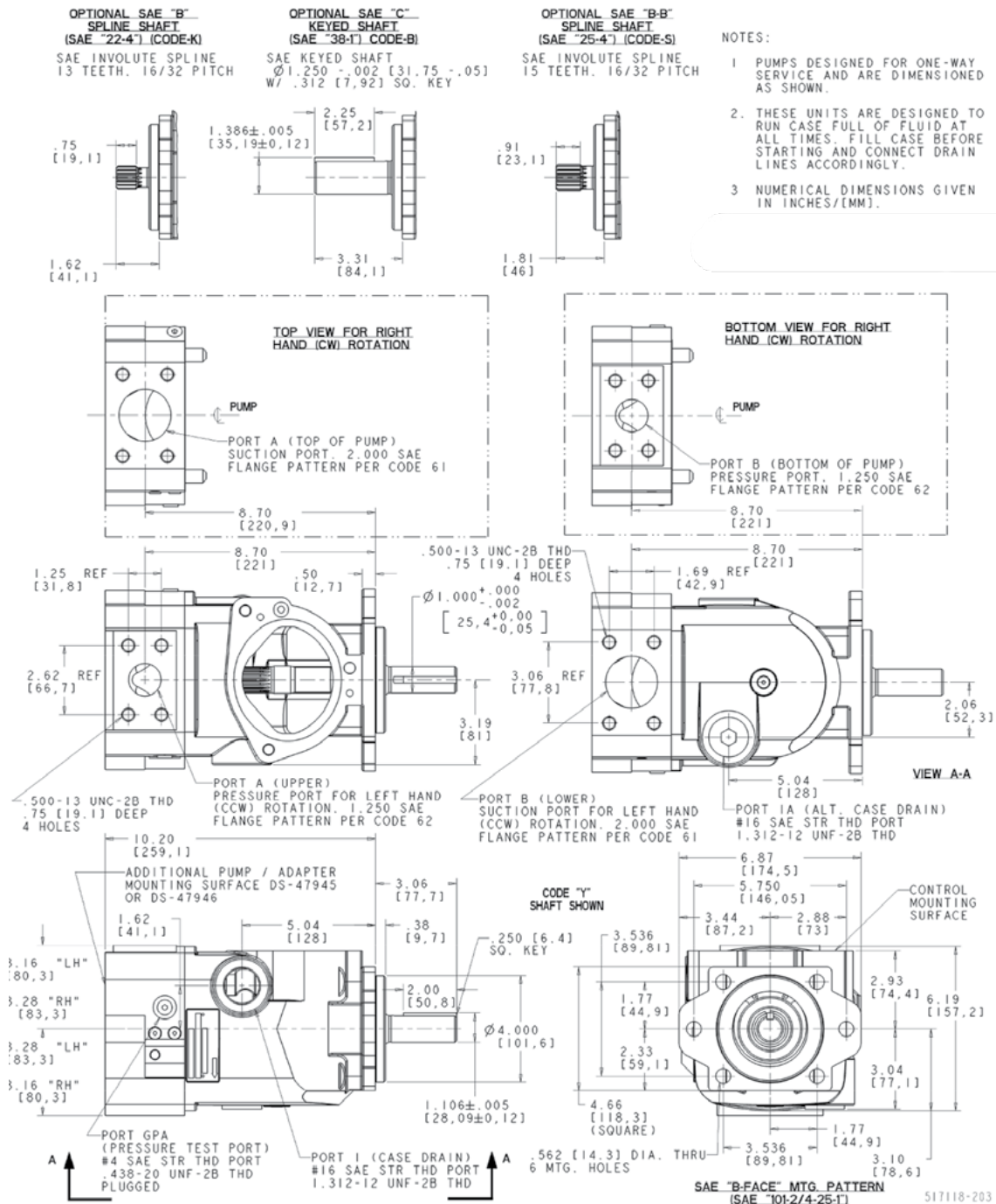
PVG-048

INSTALLATION DRAWING: BASIC PUMP • TOP/BOTTOM PORTED - THRU SHAFT

CONNECTION TABLE	
PORT	FITTING
INLET	2" SAE Code 61 Flange
OUTLET	1.25" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE B-B, 1.00" Dia.) 2.0" Long Keyway	3,500
S	Splined (SAE B-B, 15T, 16/32 Pitch)	7,000
K	Splined (SAE B, 13T, 16/32 Pitch)	3,500

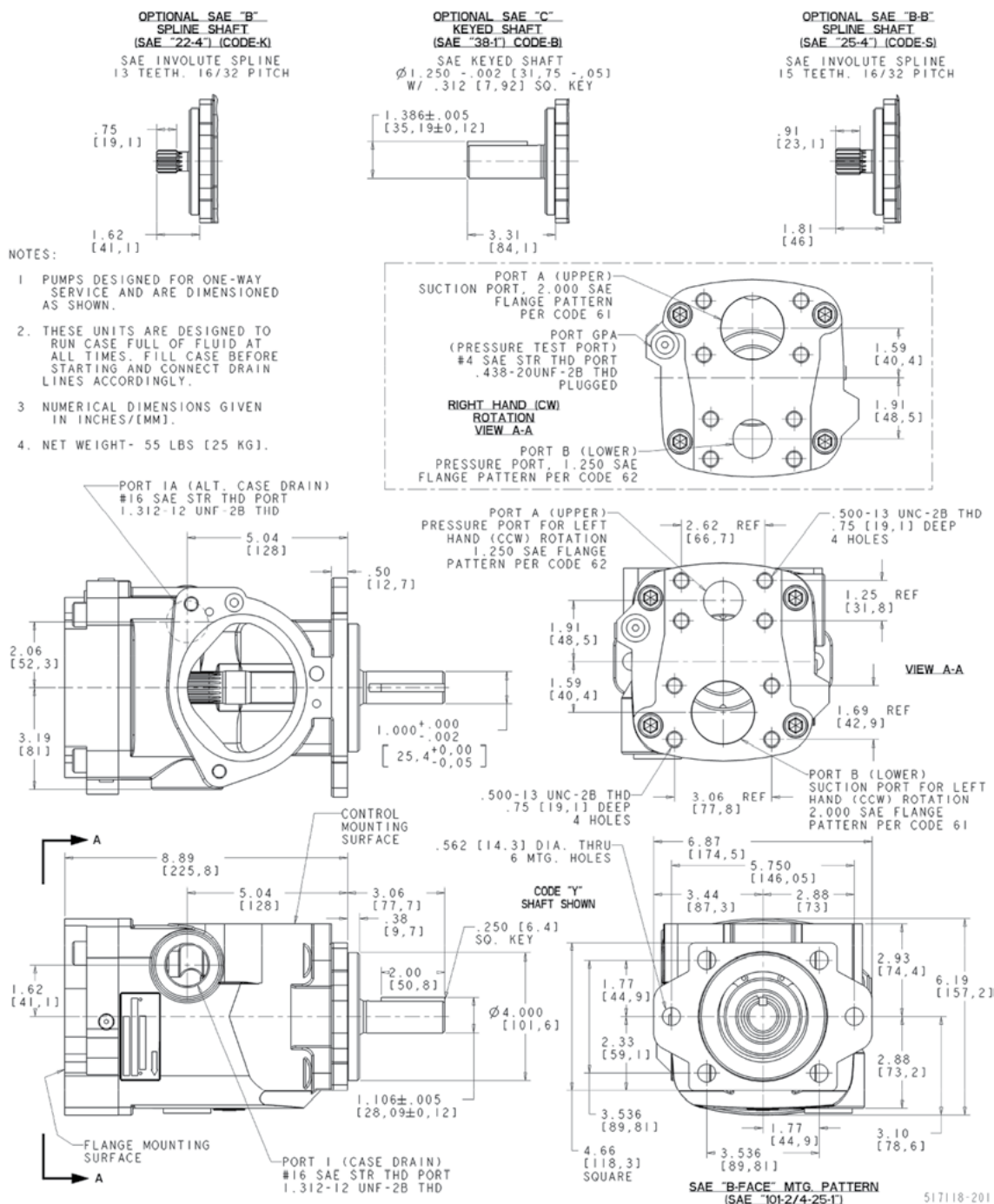
3500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT



INSTALLATION DRAWING: BASIC PUMP • REAR PORTED

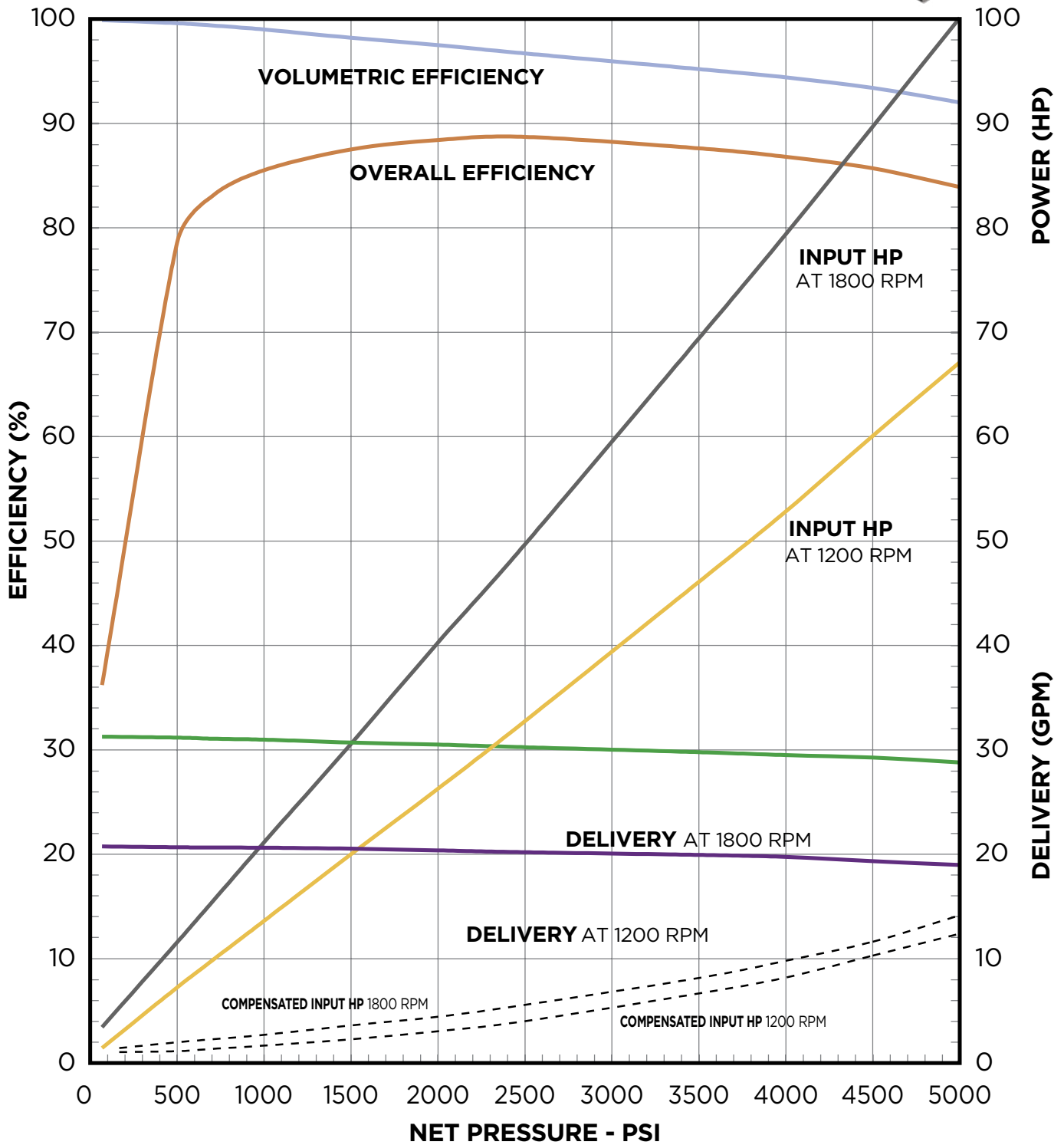
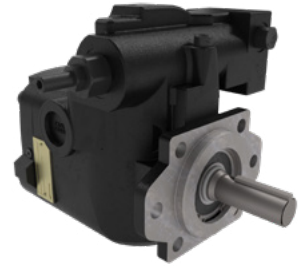
CONNECTION TABLE	
PORT	FITTING
INLET	2" SAE Code 61 Flange
OUTLET	1.25" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE B-B, 1.00" Dia.) 2.0" Long Keyway	3,500
S	Splined (SAE B-B, 15T, 16/32 Pitch)	7,000
K	Splined (SAE B, 13T, 16/32 Pitch)	3,500

3500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT


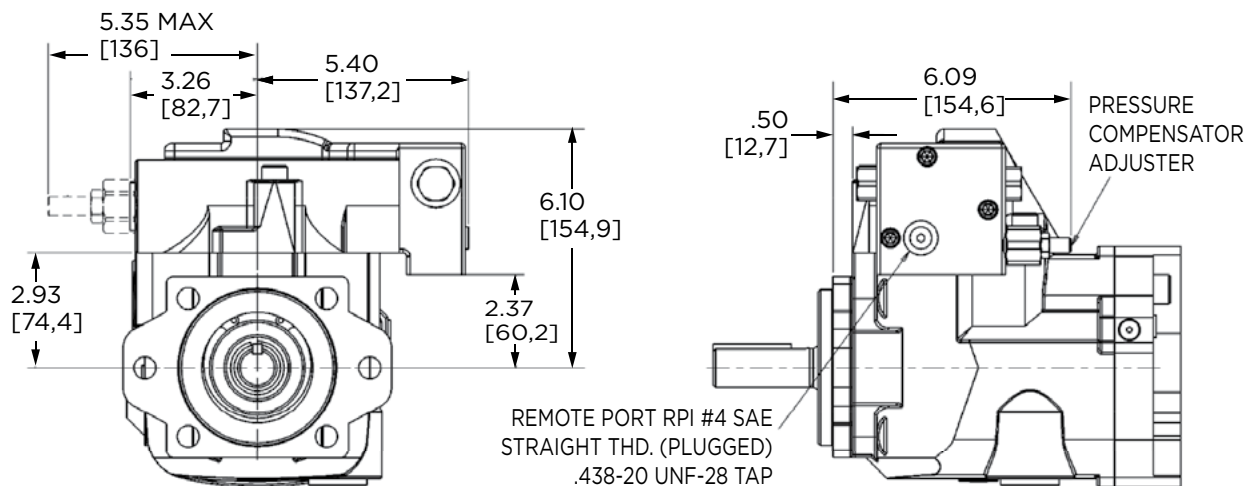
PVG-065 | DISPLACEMENT: 65 CC/REV

PERFORMANCE DATA

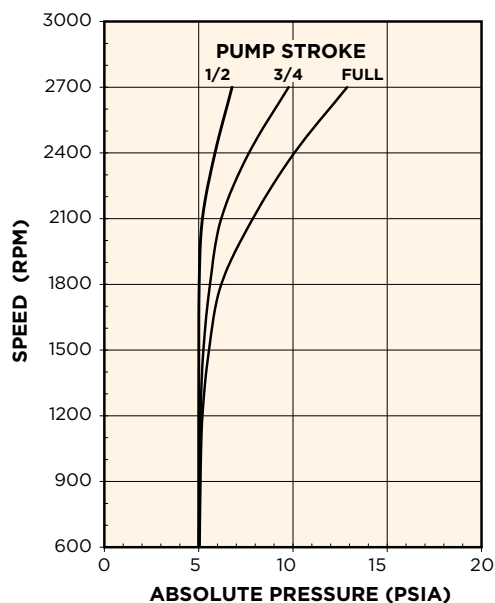


PVG-065 | DISPLACEMENT: 65 CC/REV

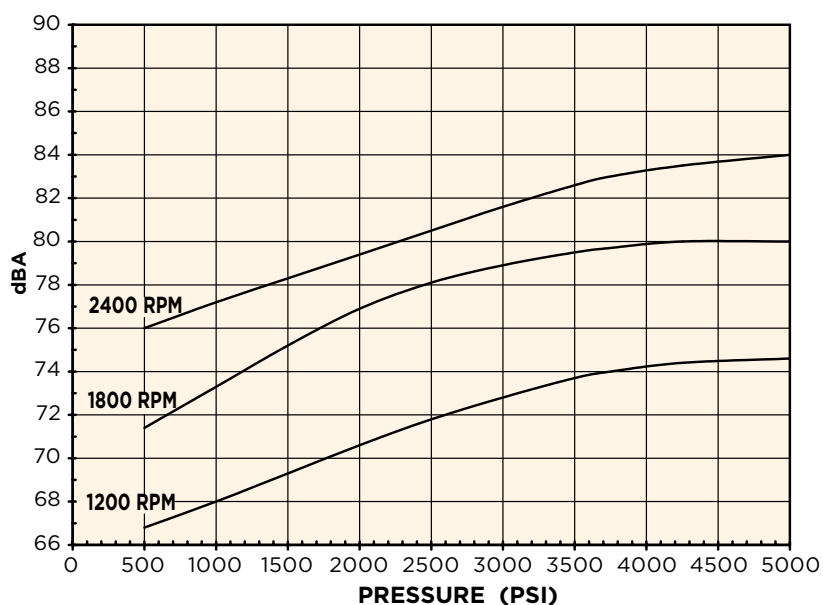
DIMENSIONS Inches [mm]



INLET DATA



SOUND DATA





CONNECTION TABLE

SHAFT TORQUE RATINGS

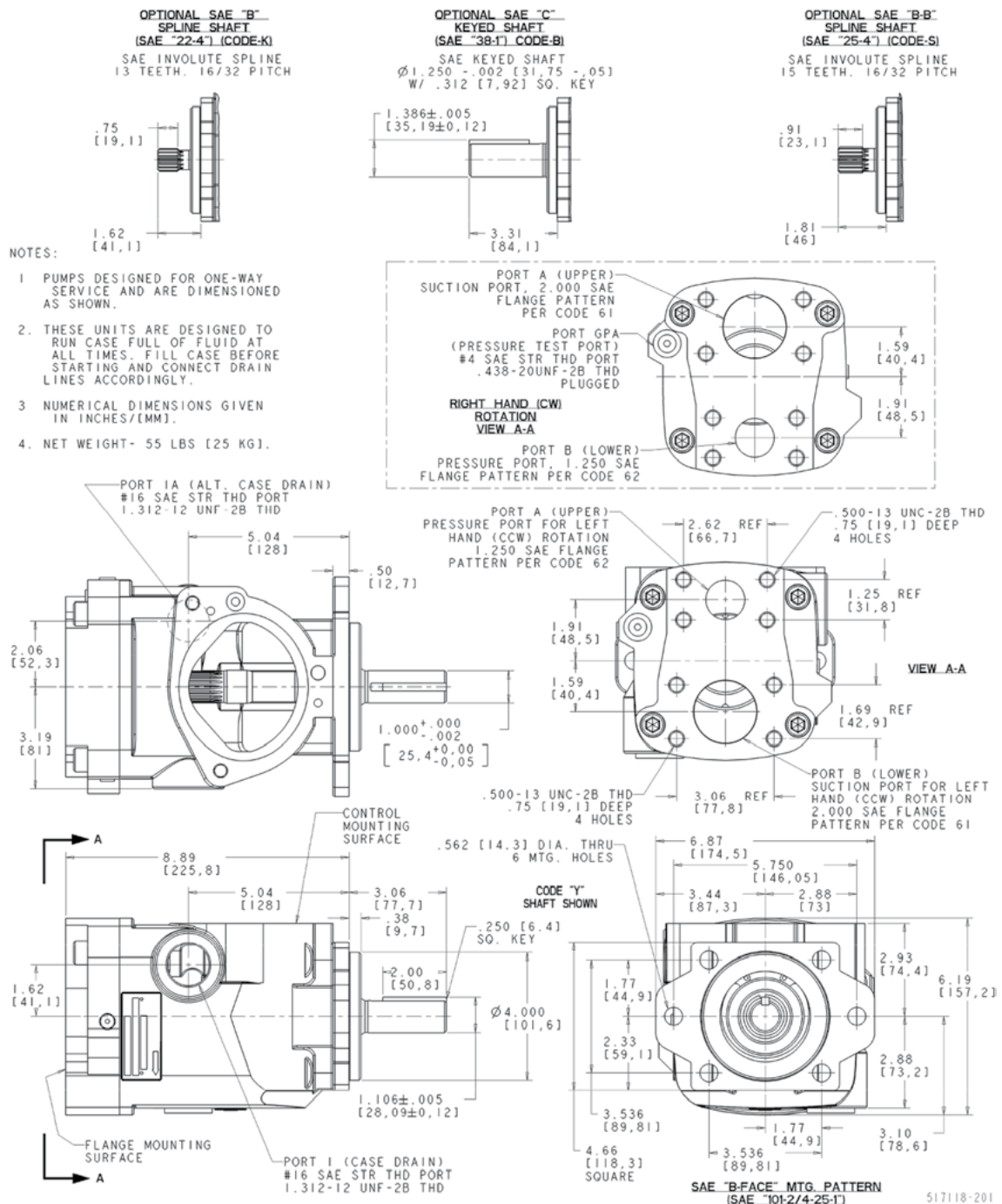
3500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT



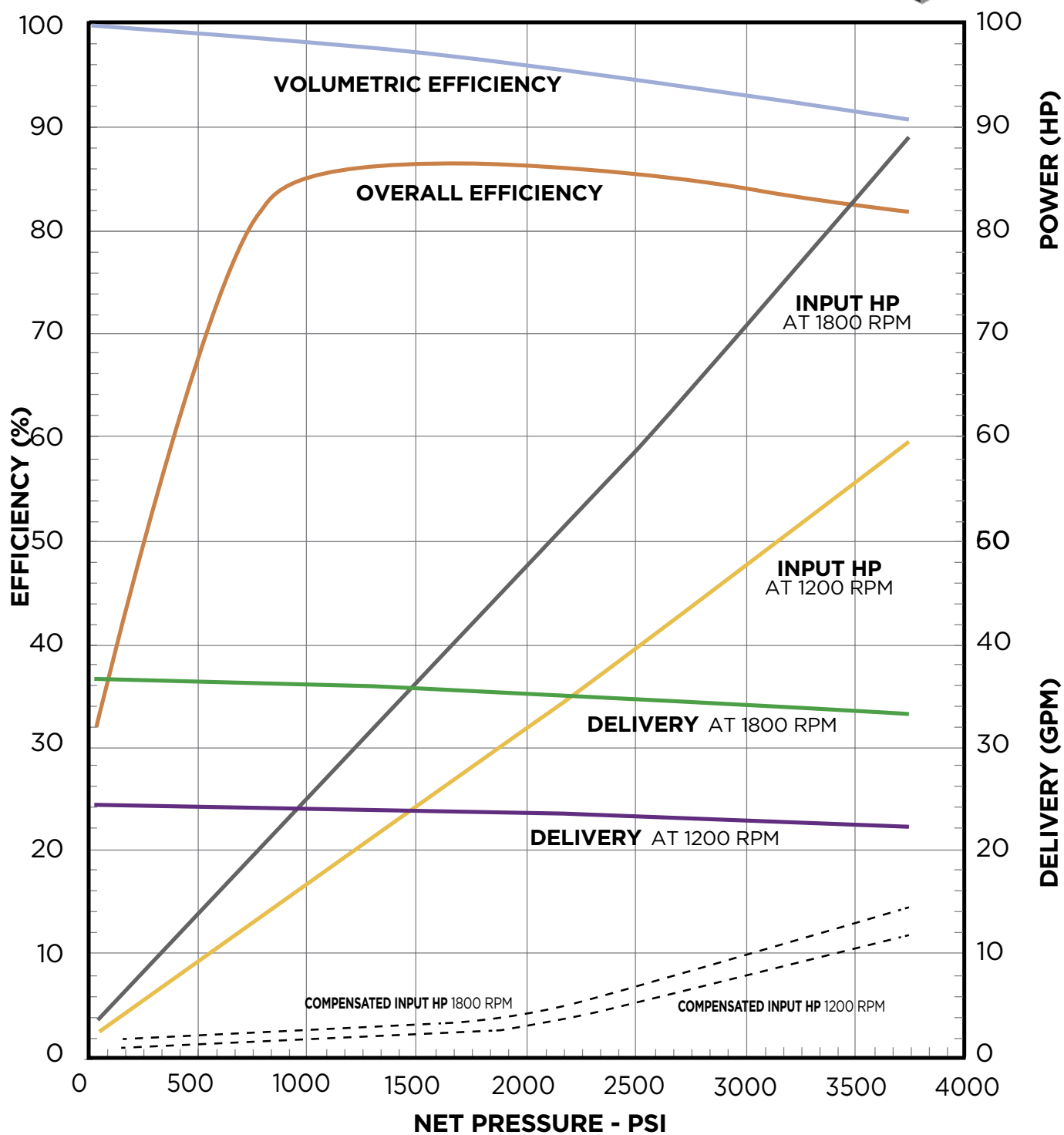
INSTALLATION DRAWING: BASIC PUMP • REAR PORTED

CONNECTION TABLE	
PORT	FITTING
INLET	2" SAE Code 61 Flange
OUTLET	1.25" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE B-B, 1.00" Dia.) 2.0" Long Keyway	3,500
S	Splined (SAE B-B, 15T, 16/32 Pitch)	7,000
K	Splined (SAE B, 13T, 16/32 Pitch)	3,500

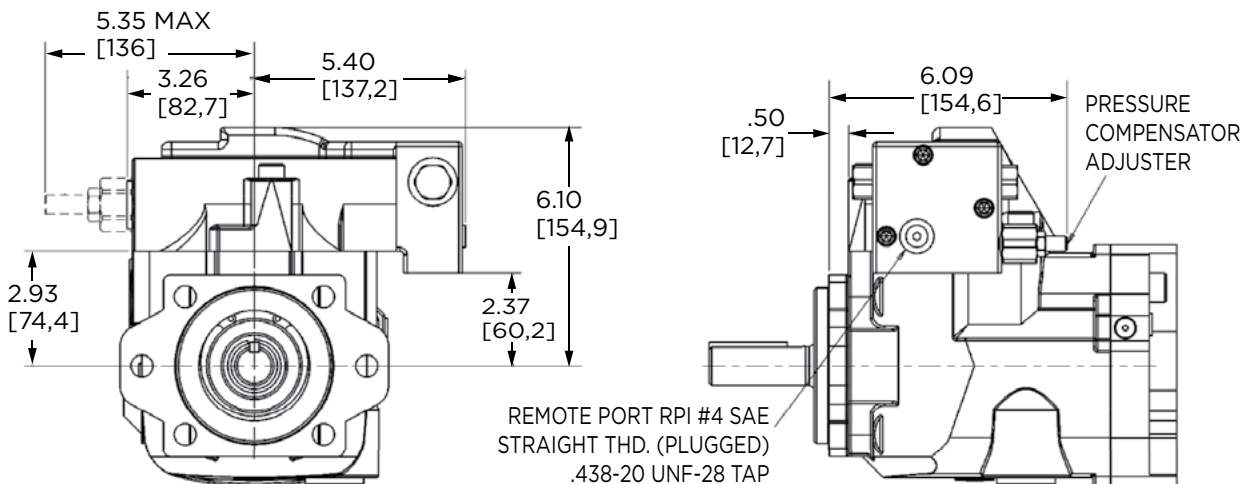
3500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT


PERFORMANCE DATA

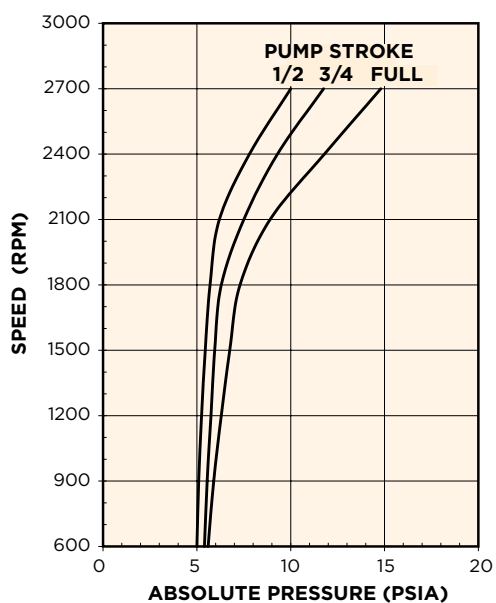


PVG-075 | DISPLACEMENT: 75 CC/REV

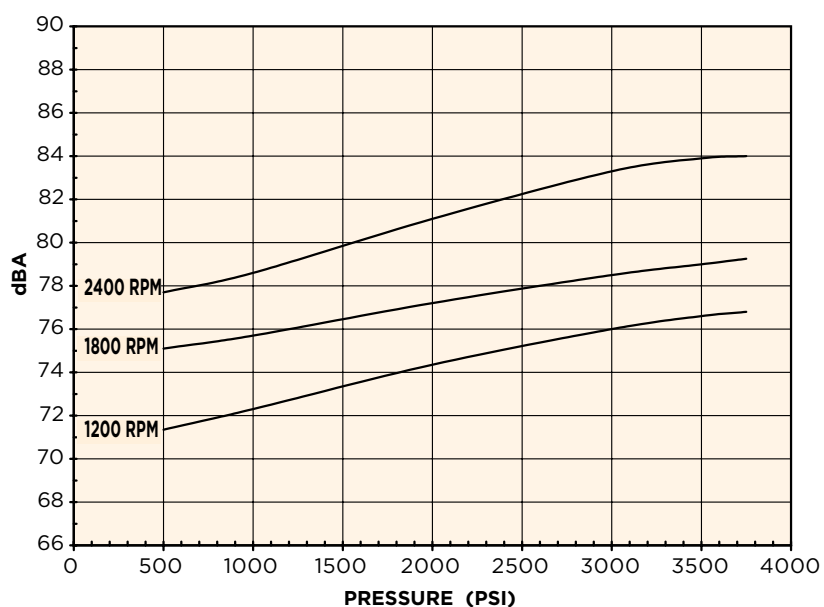
DIMENSIONS Inches [mm]



INLET DATA



SOUND DATA





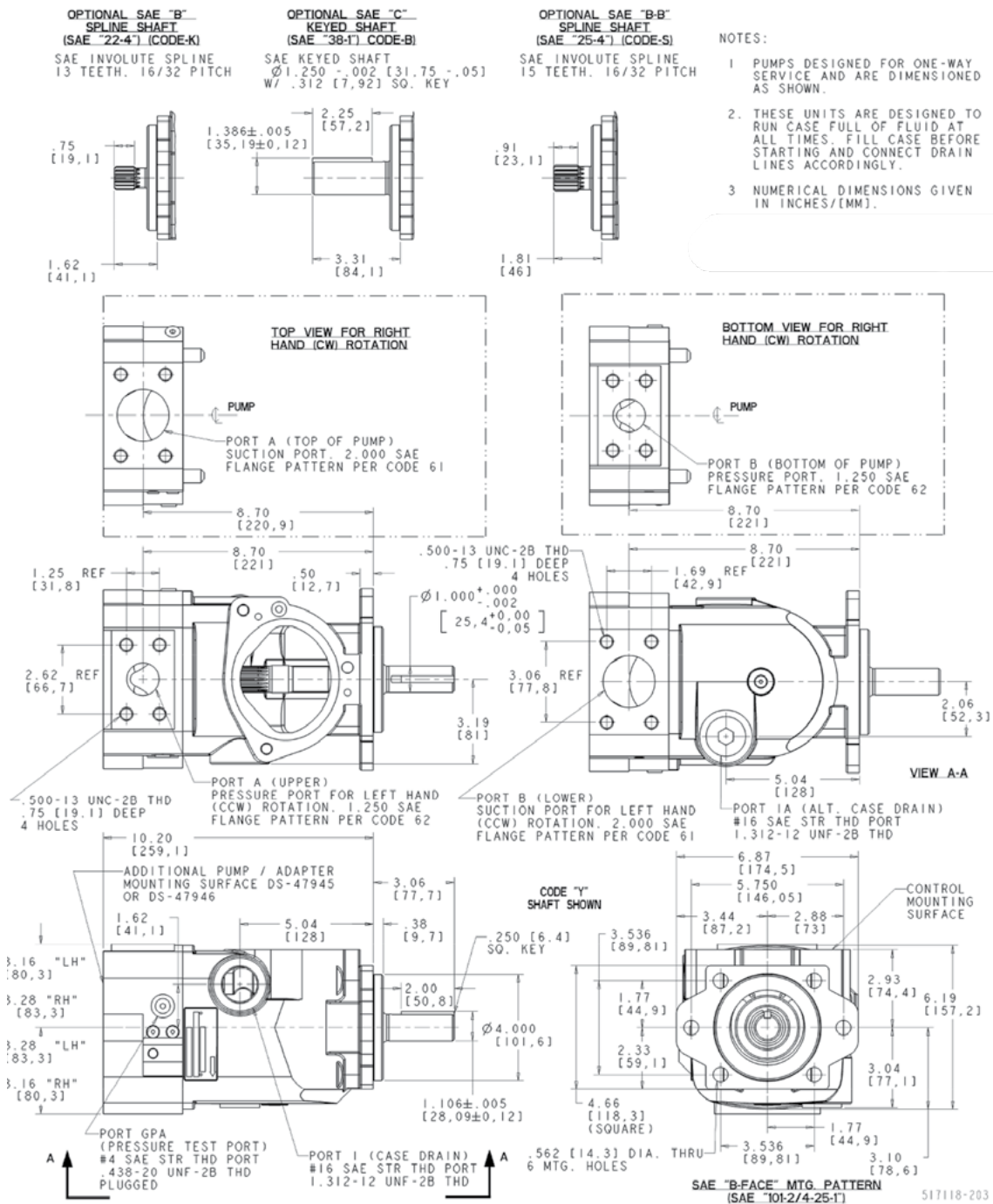
PVG-075

INSTALLATION DRAWING: BASIC PUMP • TOP/BOTTOM PORTED - THRU SHAFT

CONNECTION TABLE	
PORT	FITTING
INLET	2" SAE Code 61 Flange
OUTLET	1.25" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE B-B, 1.00" Dia.) 2.0" Long Keyway	3,500
S	Splined (SAE B-B, 15T, 16/32 Pitch)	7,000
K	Splined (SAE B, 13T, 16/32 Pitch)	3,500

3500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT



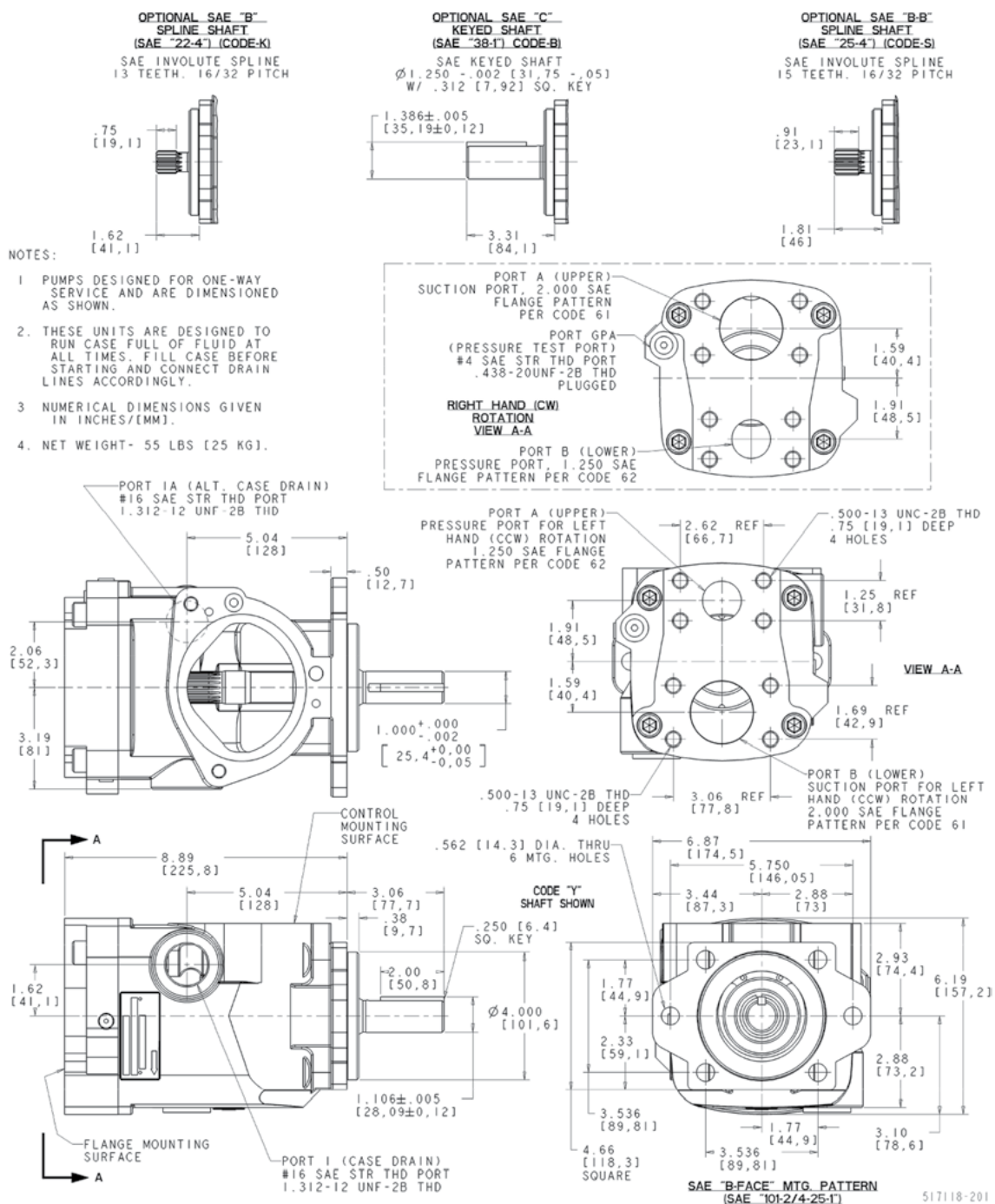
PVG-075 | DISPLACEMENT: 75 CC/REV

INSTALLATION DRAWING: BASIC PUMP • REAR PORTED

CONNECTION TABLE	
PORT	FITTING
INLET	2" SAE Code 61 Flange
OUTLET	1.25" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE B-B, 1.00" Dia.) 2.0" Long Keyway	3,500
S	Splined (SAE B-B, 15T, 16/32 Pitch)	7,000
K	Splined (SAE B, 13T, 16/32 Pitch)	3,500

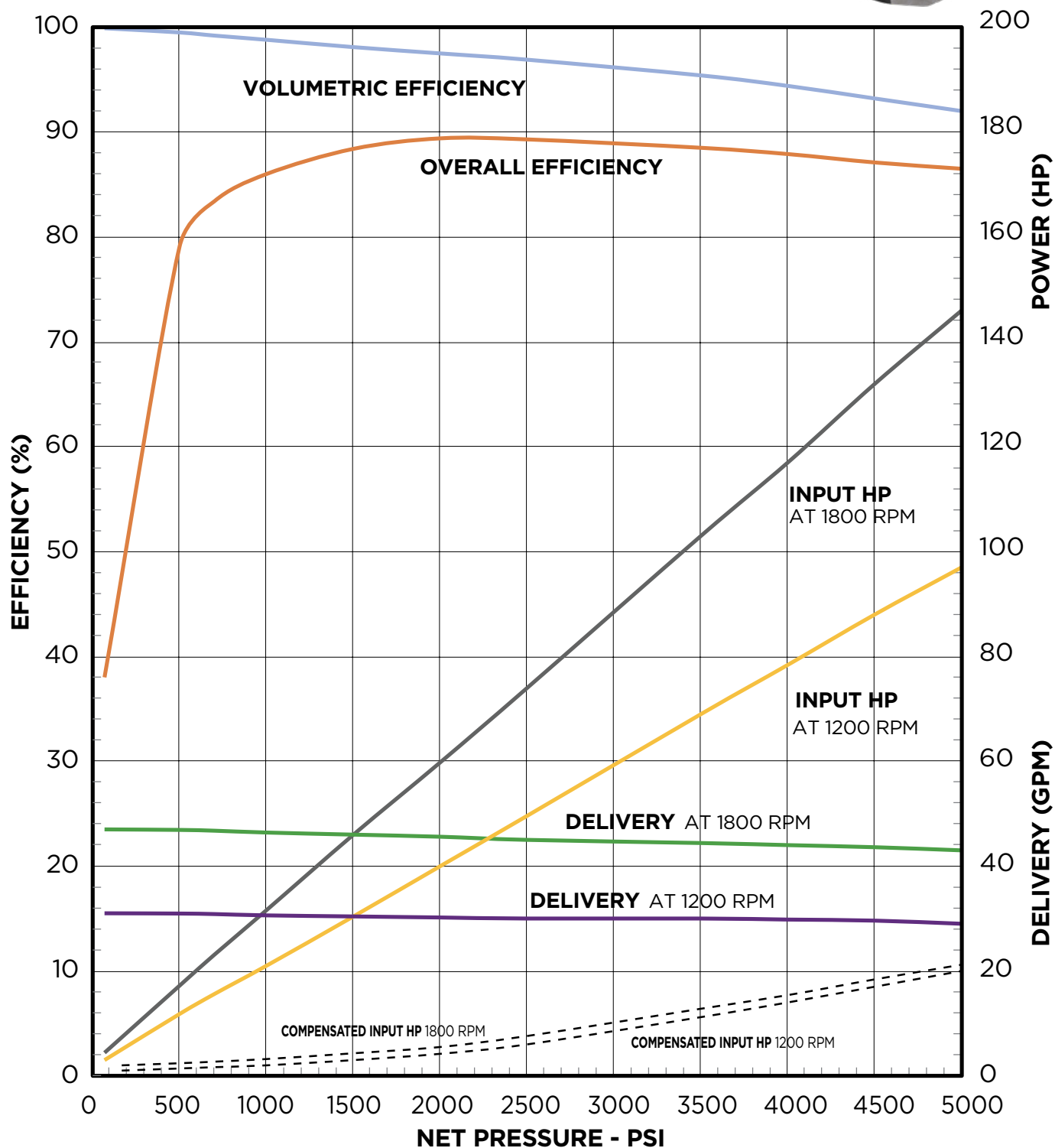
3500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT



517118-201

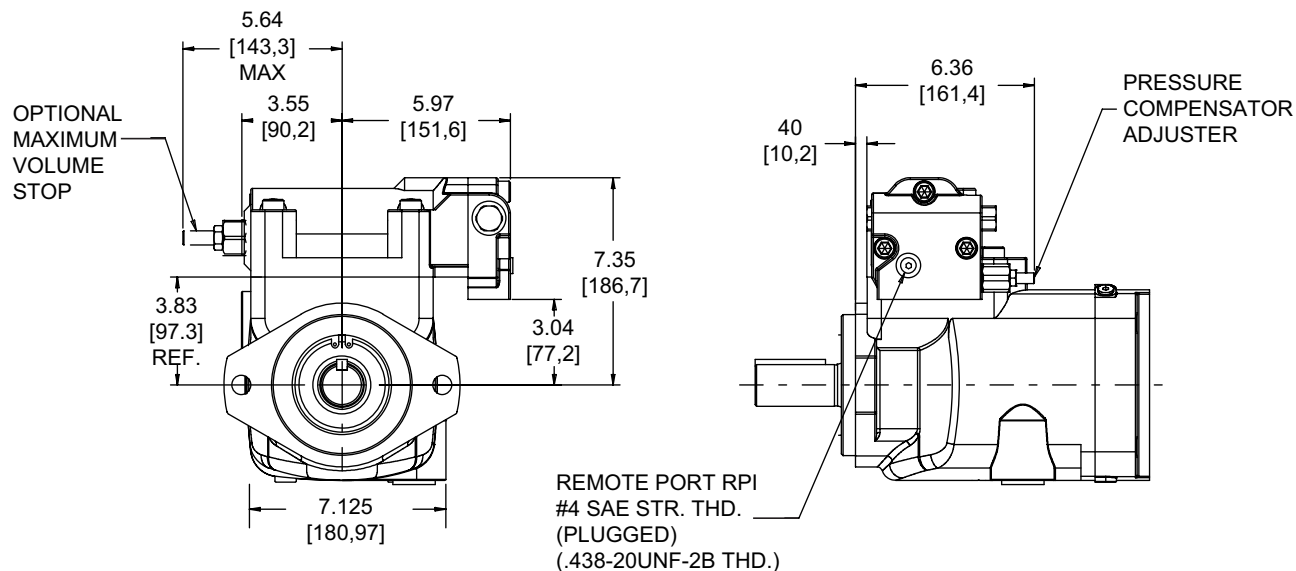
PVG-100 | DISPLACEMENT: 100 CC/REV

PERFORMANCE DATA

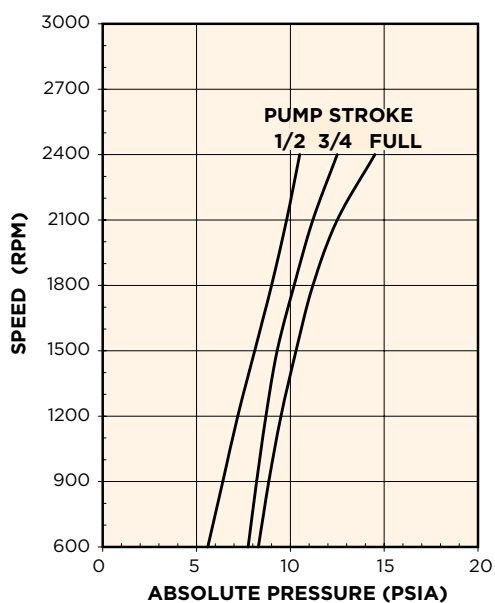


PVG-100 | DISPLACEMENT: 100 CC/REV

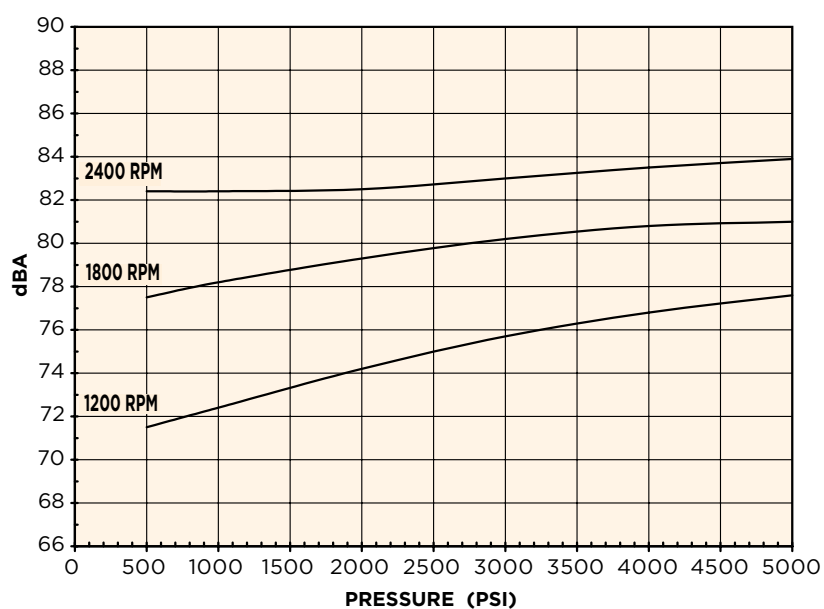
DIMENSIONS Inches [mm]



INLET DATA



SOUND DATA





CONNECTION TABLE

SHAFT TORQUE RATINGS

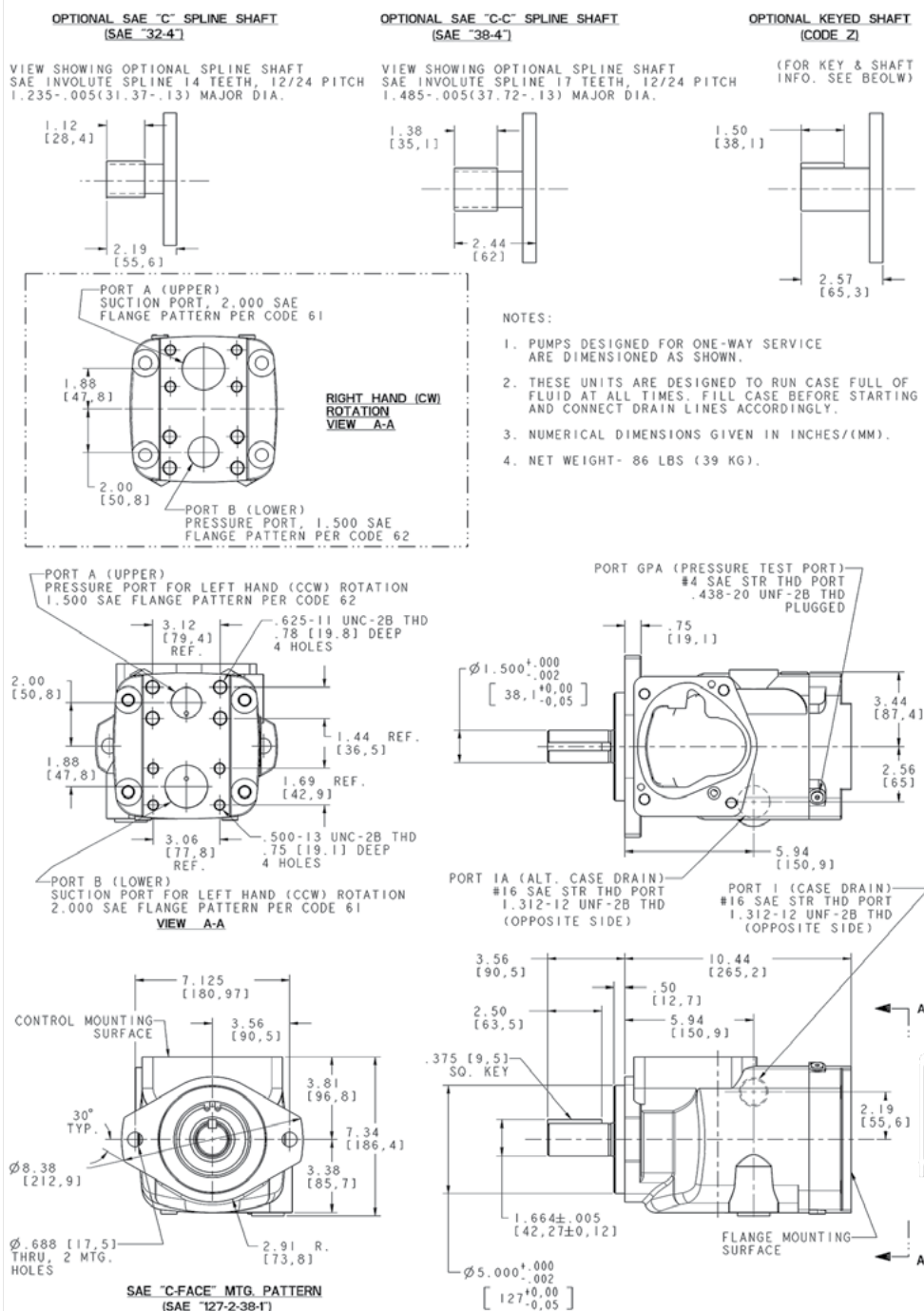
5250 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT

23

INSTALLATION DRAWING: BASIC PUMP • REAR PORTED

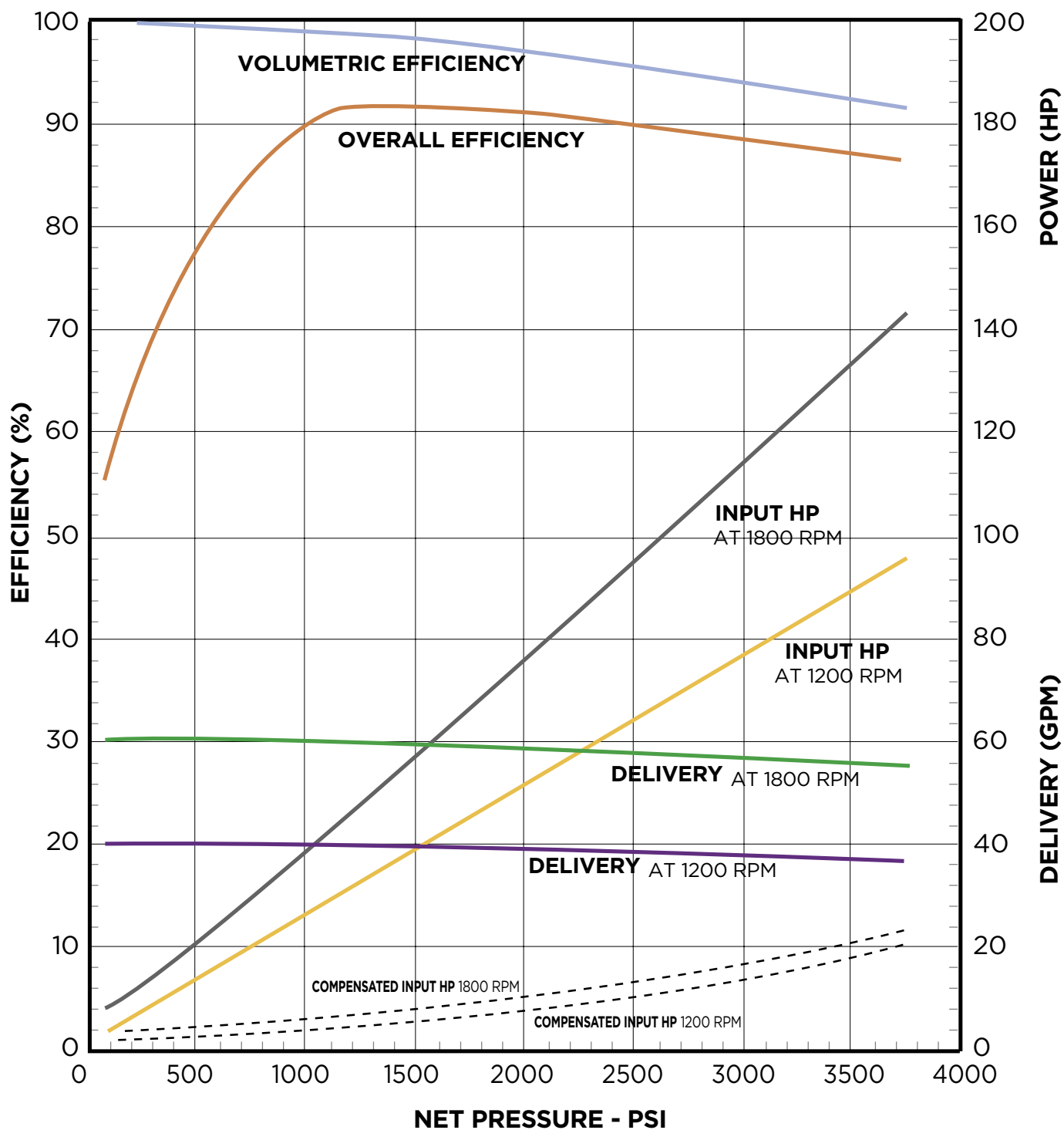
CONNECTION TABLE	
PORT	FITTING
INLET	2" SAE Code 61 Flange
OUTLET	1.50" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE C-C, 1.50" Dia.) 2.5" Long Keyway	10,500
Z	Keyed (SAE C-C, 1.50" Dia.) 1.5" Long Keyway	6,000
K	Splined (SAE C, 14T, 12/24 Pitch)	7,000

5250 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT


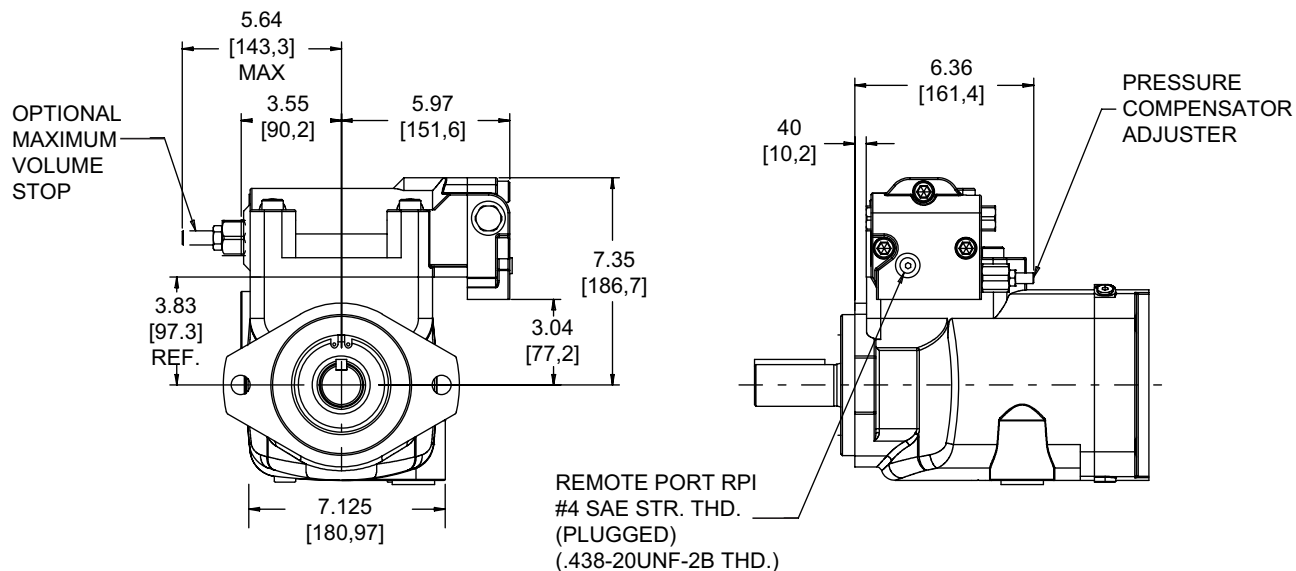
PVG-130 | DISPLACEMENT: 130 CC/REV

PERFORMANCE DATA



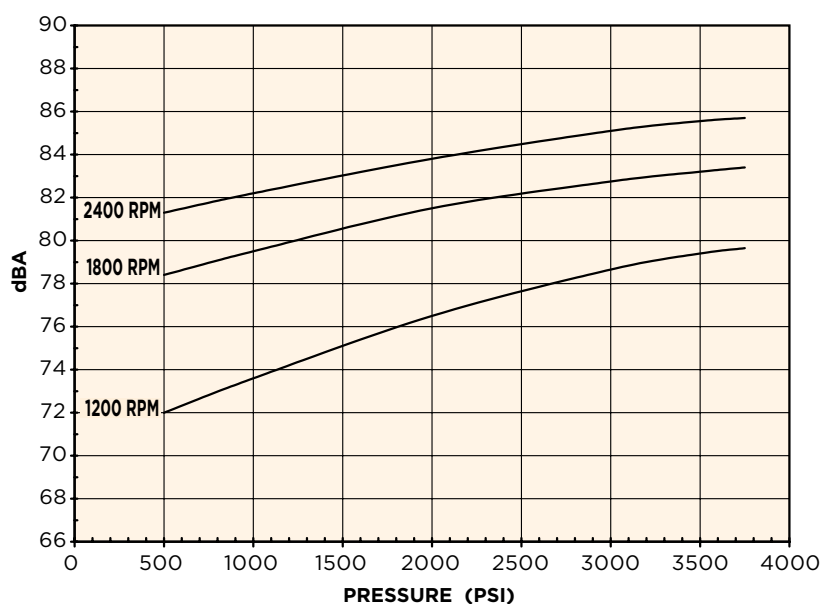
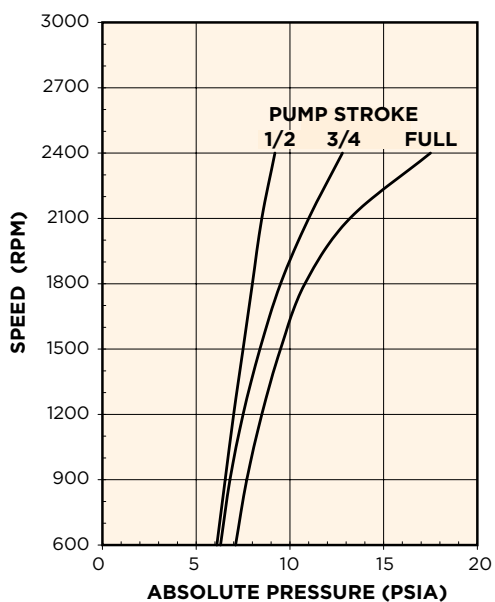
PVG-130 | DISPLACEMENT: 130 CC/REV

DIMENSIONS Inches [mm]



INLET DATA

SOUND DATA





CONNECTION TABLE

SHAFT TORQUE RATINGS

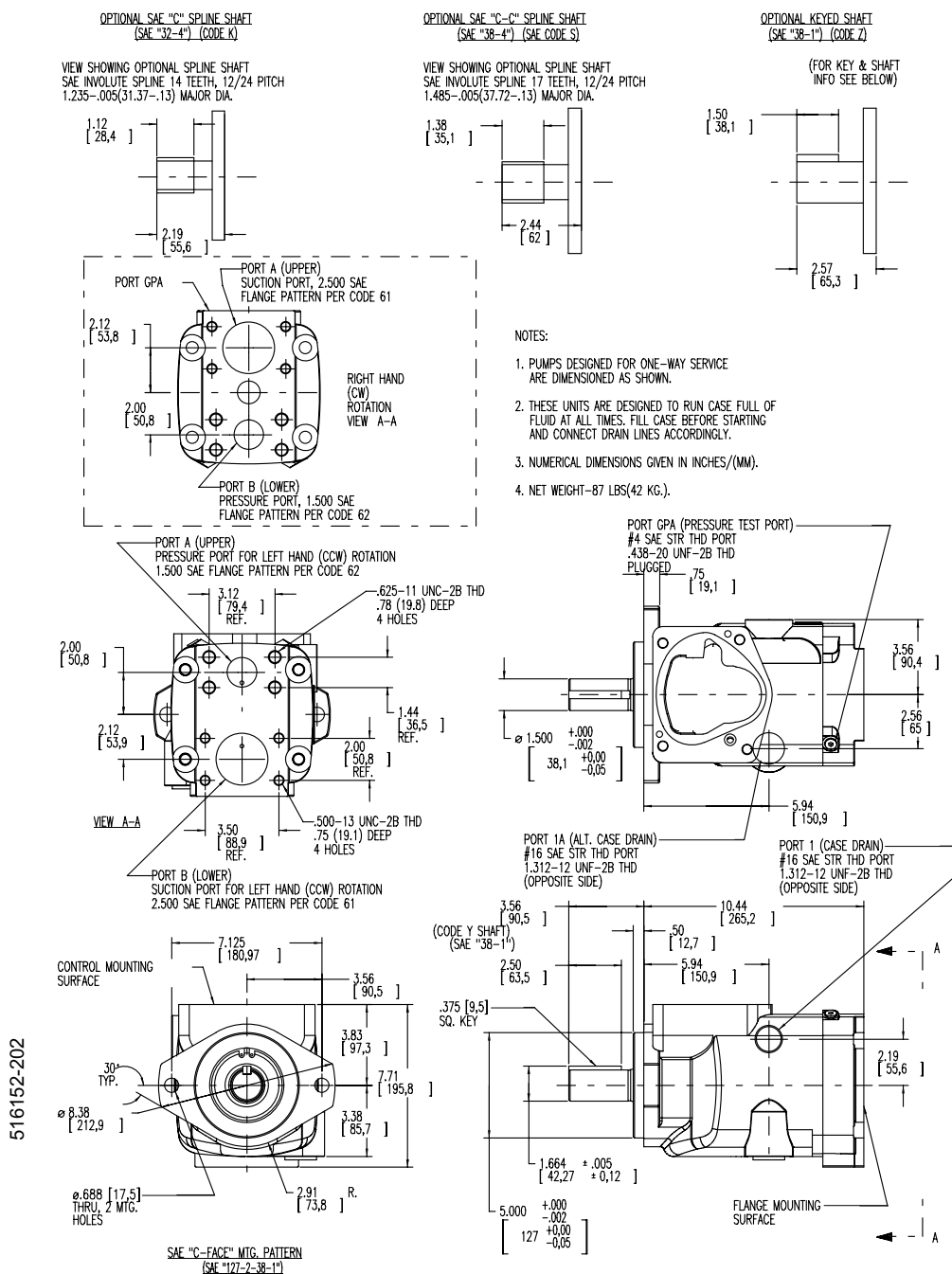
5250 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT

516152-206

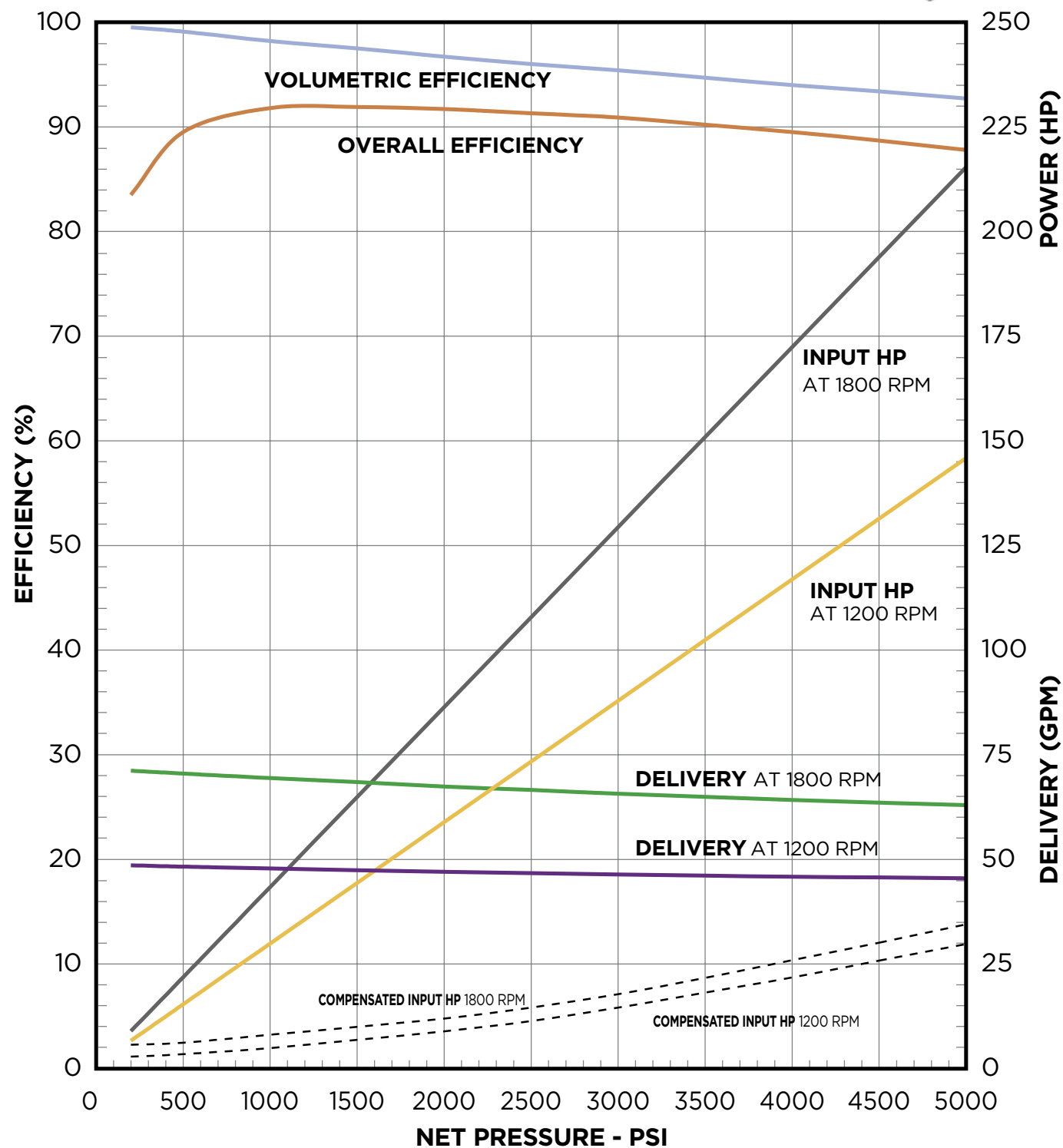
INSTALLATION DRAWING: BASIC PUMP • REAR PORTED

CONNECTION TABLE	
PORT	FITTING
INLET	2.50" SAE Code 61 Flange
OUTLET	1.50" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE C-C, 1.50" Dia.) 2.5" Long Keyway	10,500
Z	Keyed (SAE C-C, 1.50" Dia.) 1.5" Long Keyway	6,000
K	Splined (SAE C, 14T, 12/24 Pitch)	7,000

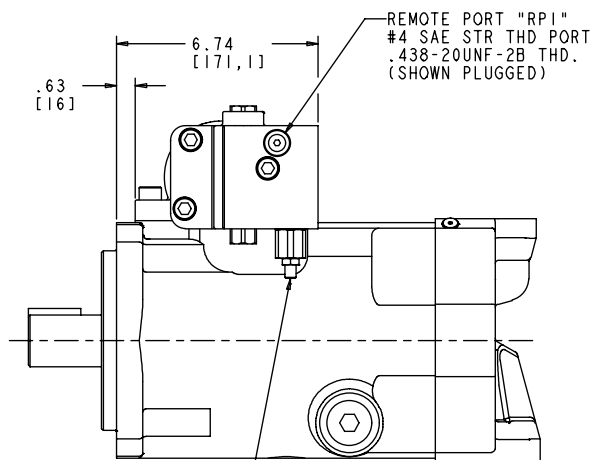
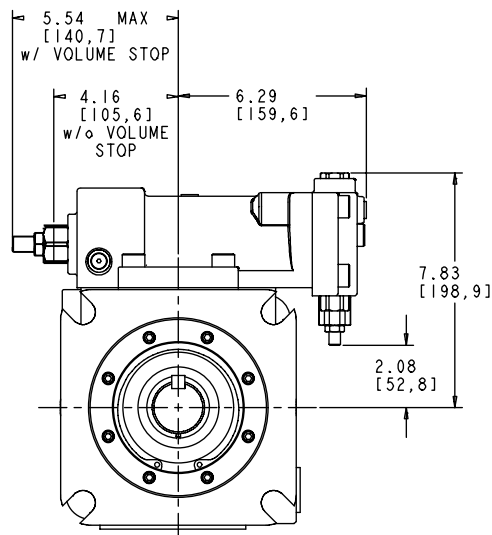
5250 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT


PERFORMANCE DATA



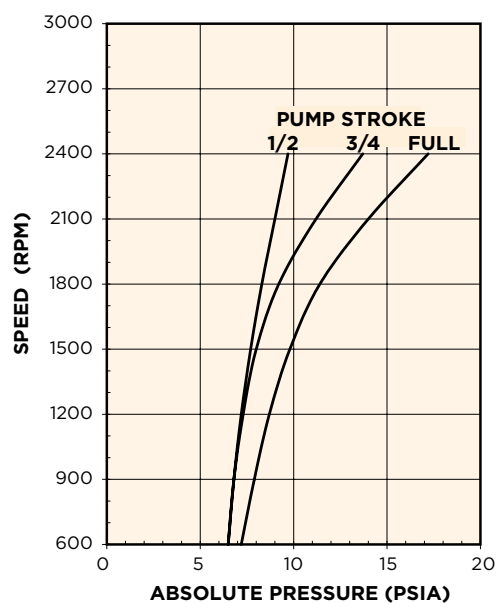
PVG-150 | DISPLACEMENT: 150 CC/REV

DIMENSIONS Inches [mm]

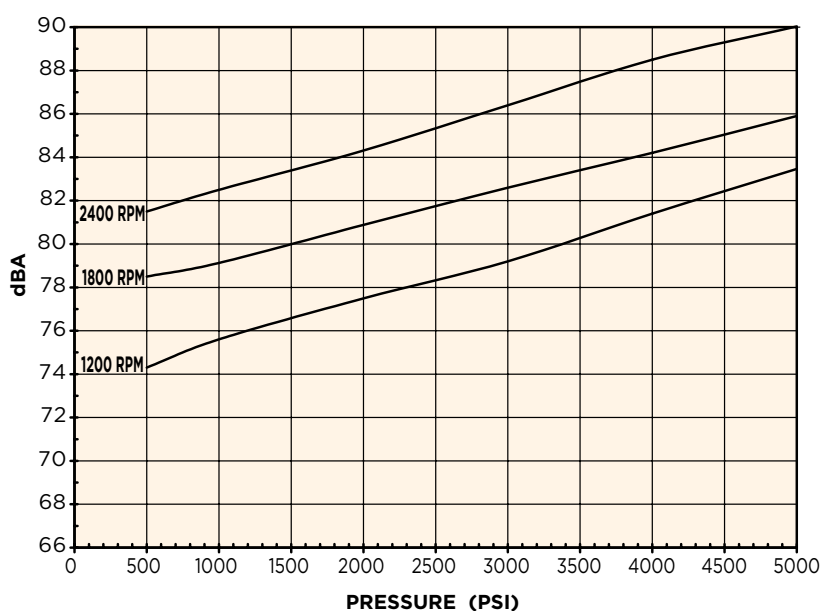


PRESSURE COMPENSATOR ADJUSTMENT
 .188" [4.8 mm] INTERNAL HEX
 1 TURN CW INCREASES PRESSURE SETTING 1000 PSI.
 RANGE: 300 TO 5000 PSI
 FACTORY SET AT MINIMUM UNLESS
 SPECIFIED OTHERWISE.

INLET DATA



SOUND DATA





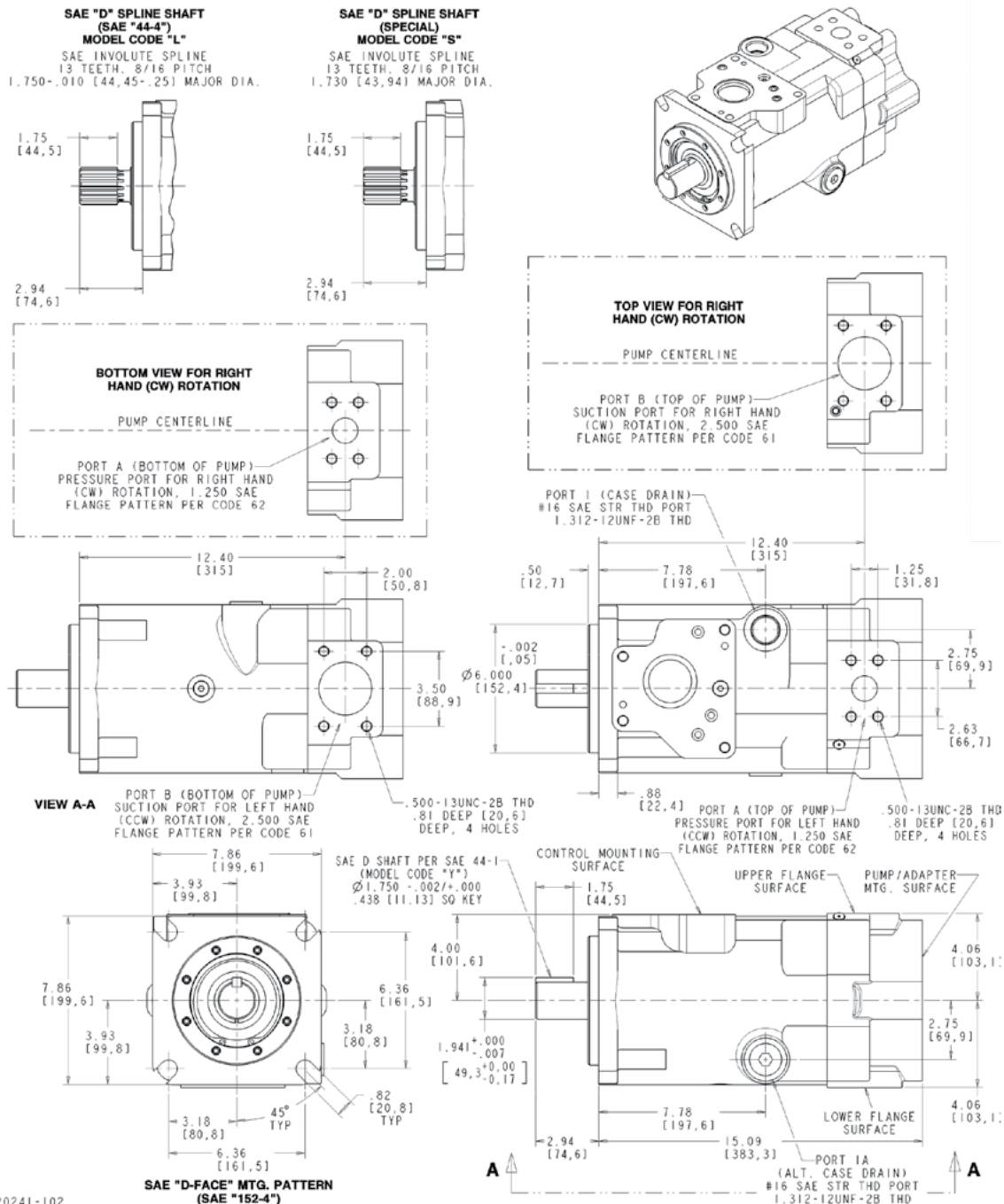
PVG-150

INSTALLATION DRAWING: BASIC PUMP • TOP/BOTTOM PORTED - THRU SHAFT

CONNECTION TABLE	
PORT	FITTING
INLET	2.50" SAE Code 61 Flange
OUTLET	1.25" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE C-C, 1.75" Dia.) 1.75" Long Keyway	15,000
S	Splined (SAE D, 13T, 8/16 Pitch)	15,000

7500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT



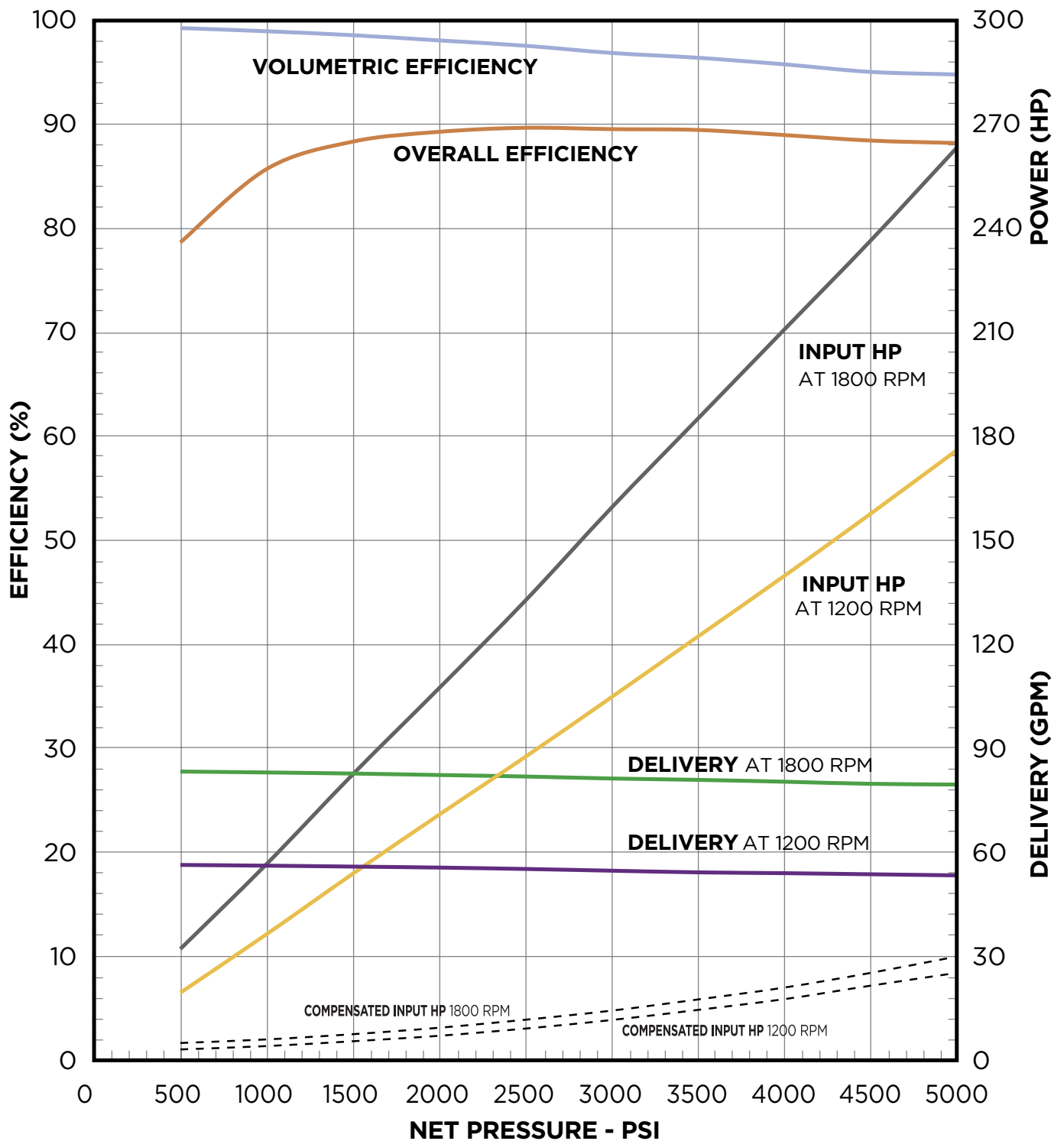
520241-102

OILGEAR

WWW.OILGEAR.COM

PVG-180 | DISPLACEMENT: 180 CC/REV

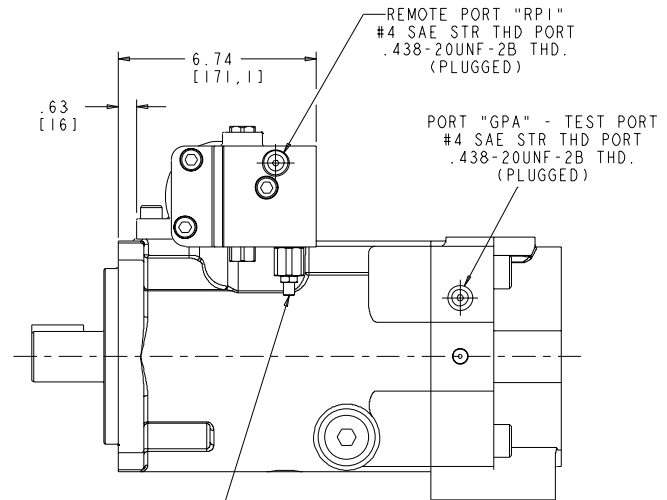
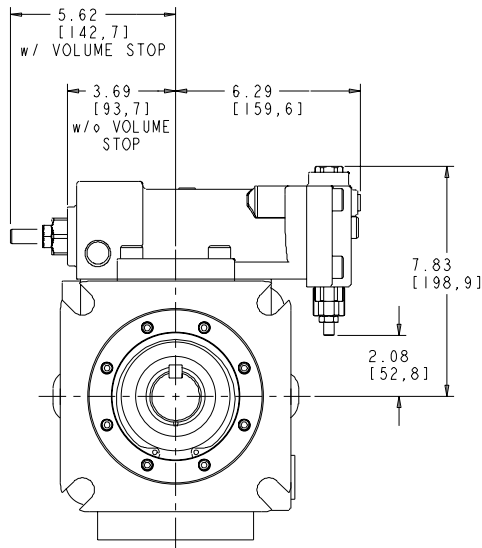
PERFORMANCE DATA





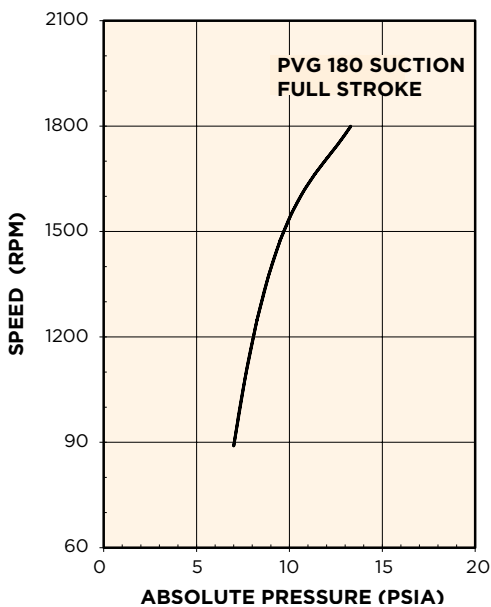
PVG-180

DIMENSIONS Inches [mm]

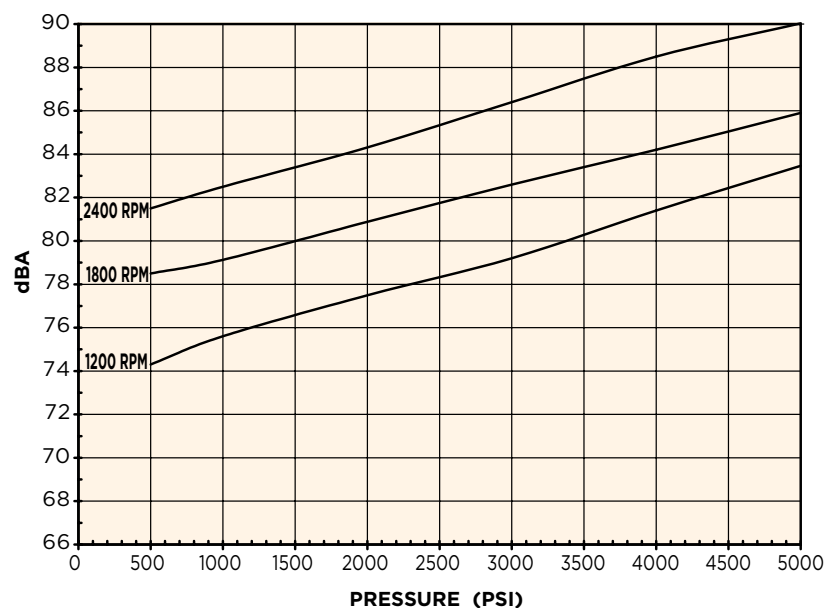


PRESSURE COMPENSATOR ADJUSTMENT
 .188" [4.8 mm] INTERNAL HEX
 1 TURN CW INCREASES PRESSURE SETTING 1000 PSI.
 RANGE: 300 TO 5000 PSI
 FACTORY SET AT MINIMUM
 UNLESS OTHERWISE SPECIFIED.

INLET DATA



SOUND DATA



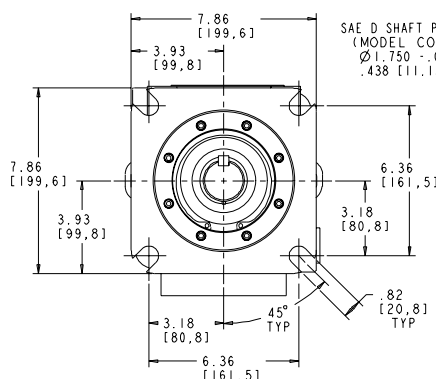
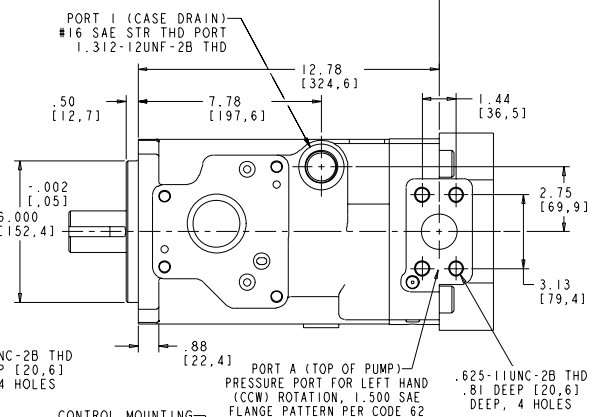
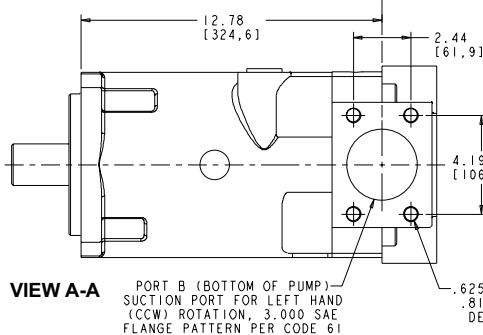
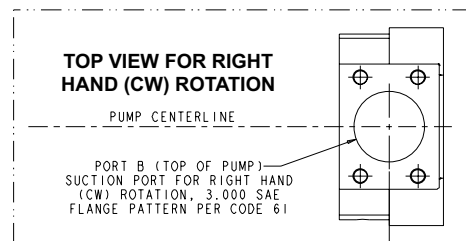
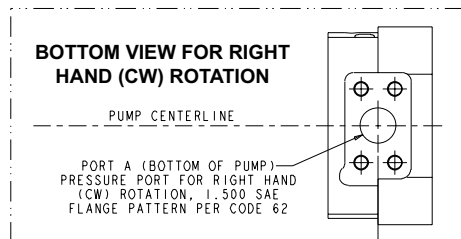
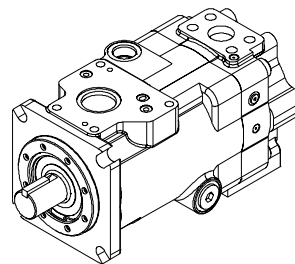
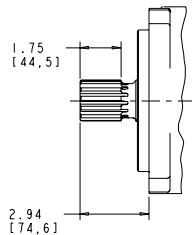
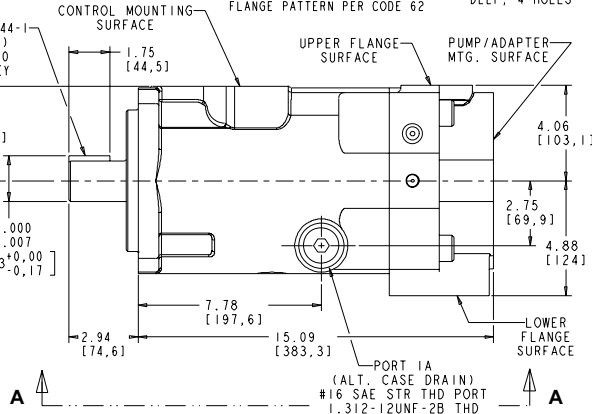
INSTALLATION DRAWING: BASIC PUMP • TOP/BOTTOM PORTED - THRU SHAFT

CONNECTION TABLE	
PORT	FITTING
INLET	3.00" SAE Code 61 Flange
OUTLET	1.50" SAE Code 62 Flange
CASE DRAIN (2 LOCATIONS)	#16 SAE Threaded Port

SHAFT TORQUE RATINGS		
MODEL CODE DESIGNATOR	SHAFT SIZE	ALLOWABLE INPUT TORQUE, IN - LBS
Y	Keyed (SAE C-C, 1.75" Dia.) 1.75" Long Keyway	15,000
L	Splined (SAE D, 13T, 8/16 Pitch)	15,000

7500 IN-LB = MAXIMUM ALLOWABLE TORQUE APPLIED TO REAR OUTPUT
**SAE "D" SPLINE SHAFT
(SAE "44-4")
MODEL CODE "L"**

SAE INVOLUTE SPLINE
13 TEETH, 8/16 PITCH
1.750⁺-.010 [44,45⁺-.25] MAJOR DIA.


**SAE "D-FACE" MTG. PATTERN
(SAE "152-4")**


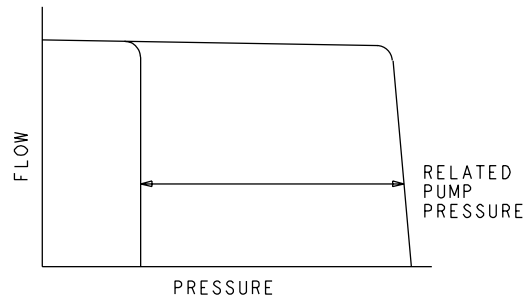
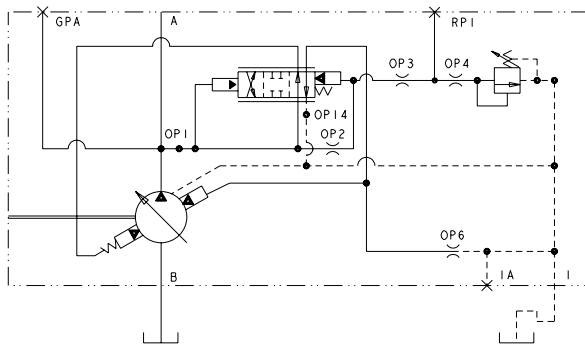
520241-302



PRESSURE COMPENSATOR P-1

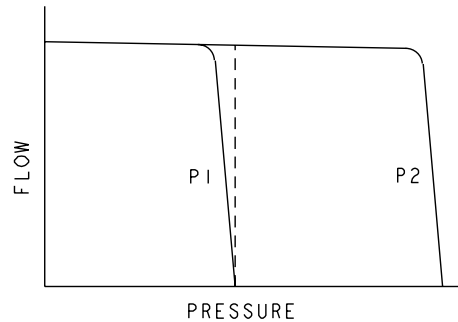
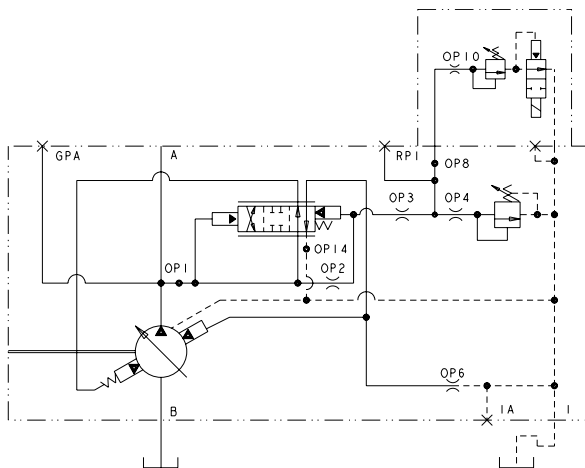
Ensures maximum pump flow until reaches preset control pressure setting then regulates output flow to match the requirements of the system while maintaining preset output pressure.

Can be adjusted from 200 psi (250 psi for PVG 150 & PVG 180) working pressure up to the maximum pressure rating of pump.



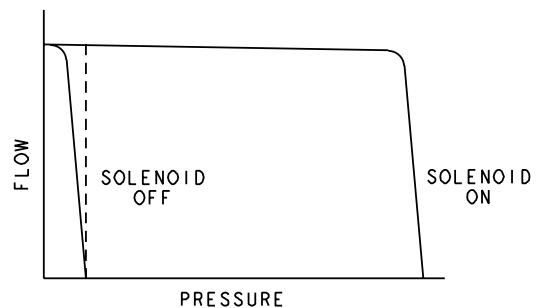
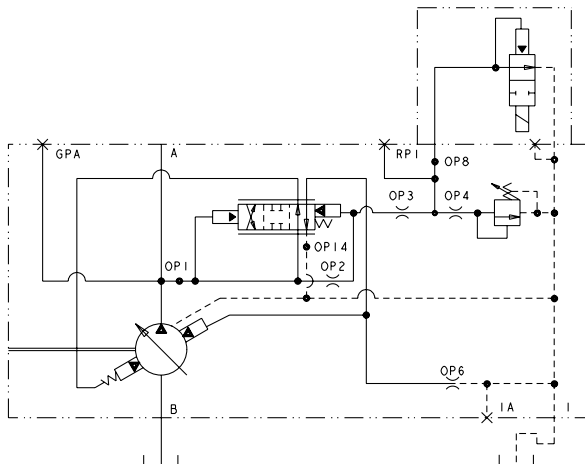
DUAL PRESSURE COMPENSATOR P-2

Provides two independently adjustable pressure compensated settings as selected by an integral solenoid.



SOFT START PRESSURE COMPENSATOR P-C

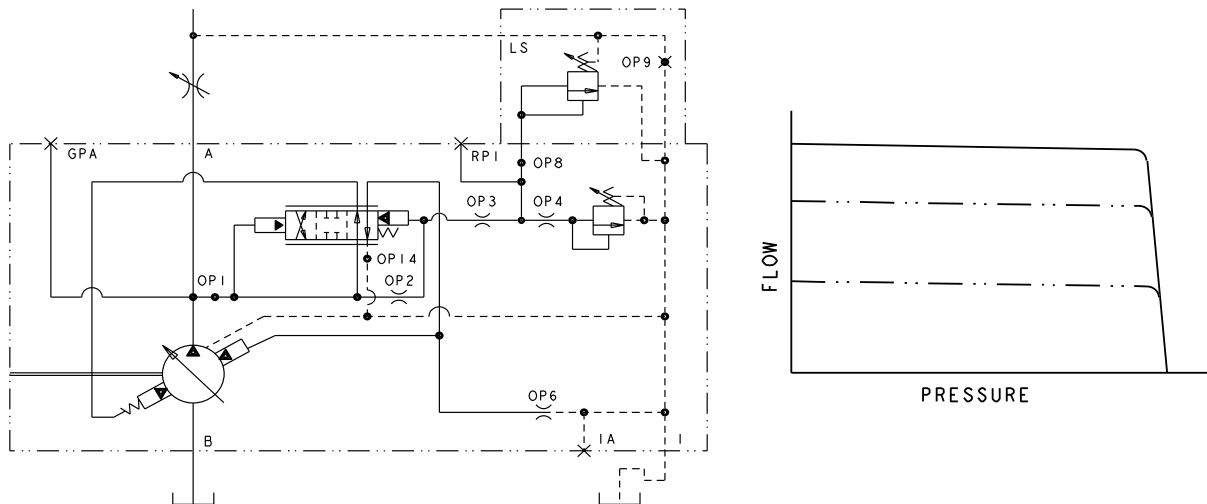
Pump starts "softly" by going quickly at low pressure to a reduced flow setting, thereby reducing start up torque requirements.



PVG | CONTROL OPTIONS

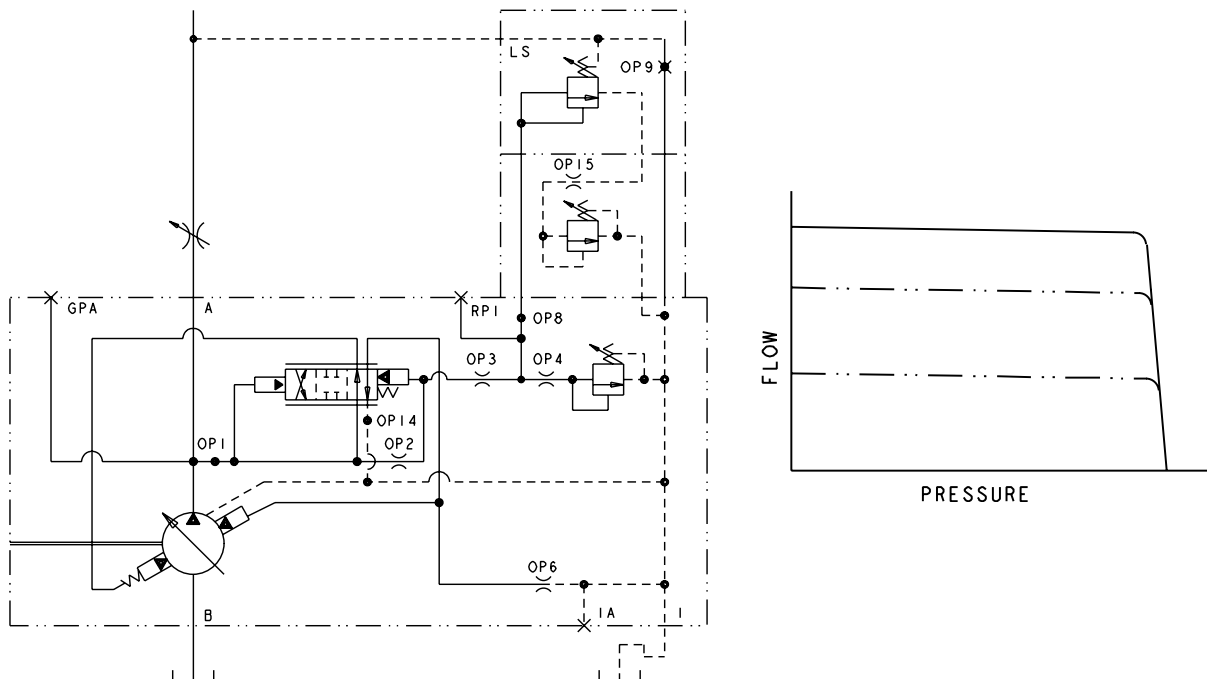
LOAD SENSING P-1/F

A constant flow output is maintained for a given flow control valve setting regardless of changes in drive speed and/or working pressure.



LOAD SENSE PLUS P-1/K

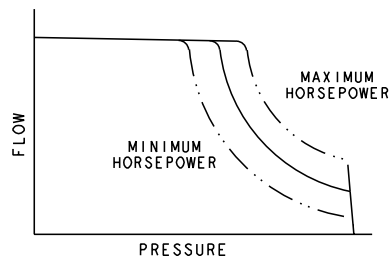
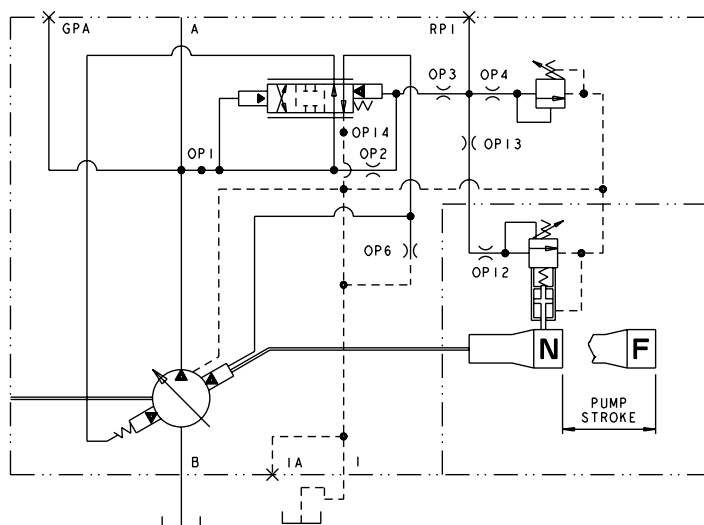
A constant flow output is maintained for a given flow control valve setting regardless of changes in drive speed and/or working pressure. The Load Sense Plus control enables the user to externally adjust the minimum pressure setting without affecting the load sense differential.





HORSEPOWER LIMITER P-1/H

Automatically reduces delivery, as unit pressure rises, to limit horsepower consumption.

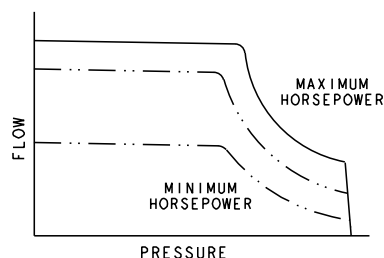
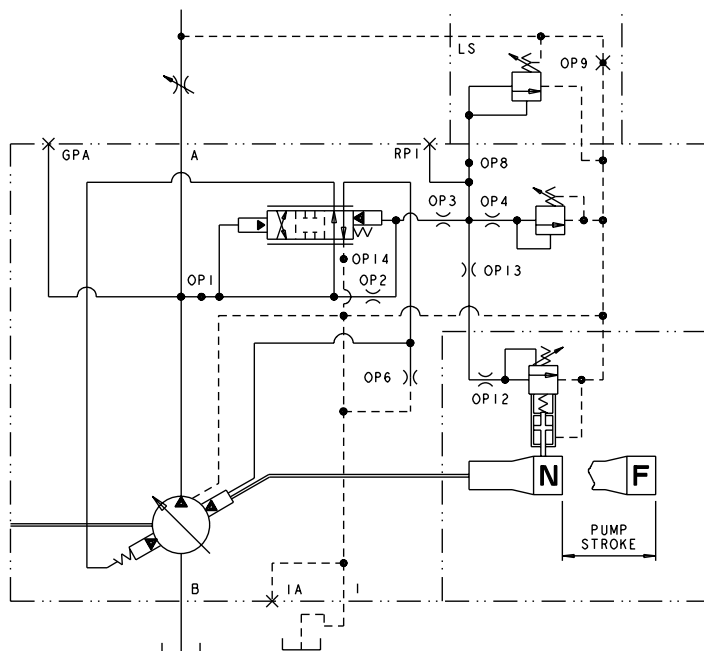


MODEL	MINIMUM HORSEPOWER	MAXIMUM HORSEPOWER	MINIMUM HORSEPOWER TO OBTAIN FLOW AT RATED PRESSURE
-048	20	80	25
-065	20	80	25
-075	20	80	20
-100	18	125	35
-130	18	125	35
-150	50	190	50
-180	50	190	50

ALL HORSEPOWER VALUES ARE FOR 1800 RPM.

HORSEPOWER LIMITER W/LOAD SENSING P-1/G

Load sensing control matches flow and pressure to load demand until (limited) horsepower setting is reached. Control then automatically reduces delivery as system pressure rises.



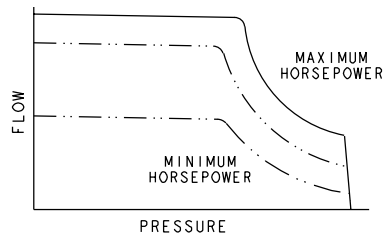
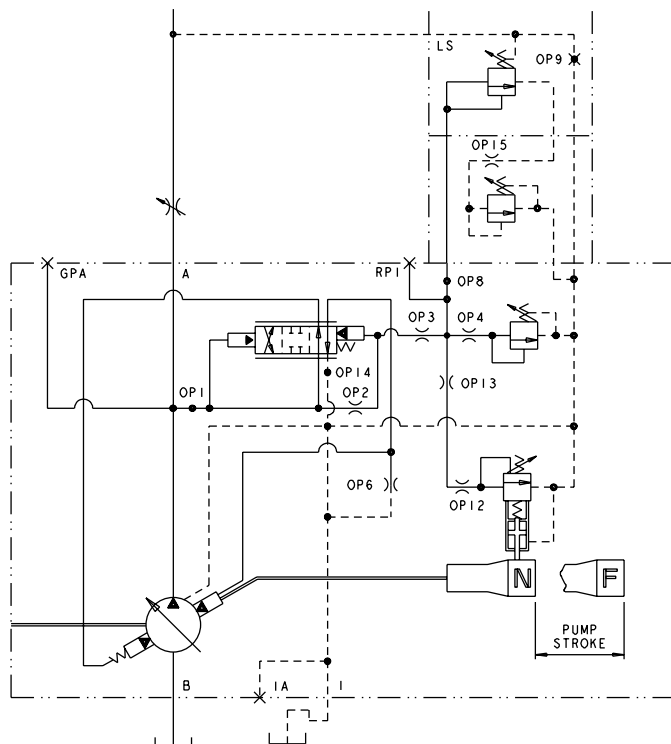
MODEL	MINIMUM HORSEPOWER	MAXIMUM HORSEPOWER	MINIMUM HORSEPOWER TO OBTAIN FLOW AT RATED PRESSURE
-048	20	80	25
-065	20	80	25
-075	20	80	20
-100	18	125	35
-130	18	125	35
-150	50	190	50
-180	50	190	50

ALL HORSEPOWER VALUES ARE FOR 1800 RPM.

PVG | CONTROL OPTIONS

HORSEPOWER LIMITER W/LOAD SENSE PLUS P-1/L

Load sensing control matches flow and pressure to load demand until (limited) horsepower setting is reached. Control then automatically reduces deliver as system pressure rises. The Load Sense Plus control enables the user to externally adjust the minimum pressure setting without affecting the load sense differential.

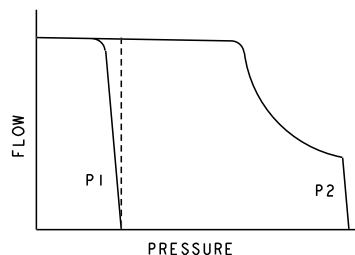
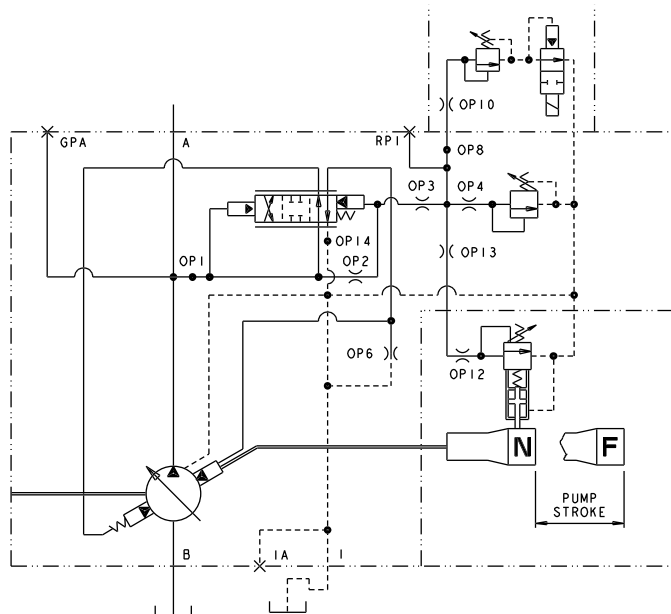


MODEL	MINIMUM HORSEPOWER	MAXIMUM HORSEPOWER	MINIMUM HORSEPOWER TO OBTAIN FLOW AT RATED PRESSURE
-048	20	80	25
-065	20	80	25
-075	20	80	20
-100	18	125	35
-130	18	125	35
-150	50	190	50
-180	50	190	50

ALL HORSEPOWER VALUES ARE FOR 1800 RPM.

DUAL PRESSURE COMPENSATOR W/HORSEPOWER LIMITER P-2/H

Provides two independently adjustable pressure compensated settings as selected by an integral solenoid. Automatically reduces delivery, as unit pressure rises, to limit horsepower consumption.



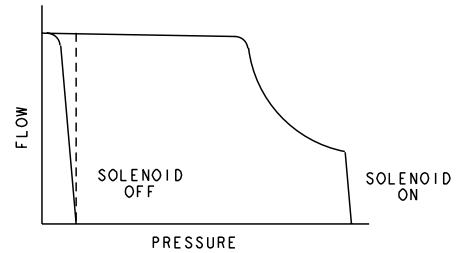
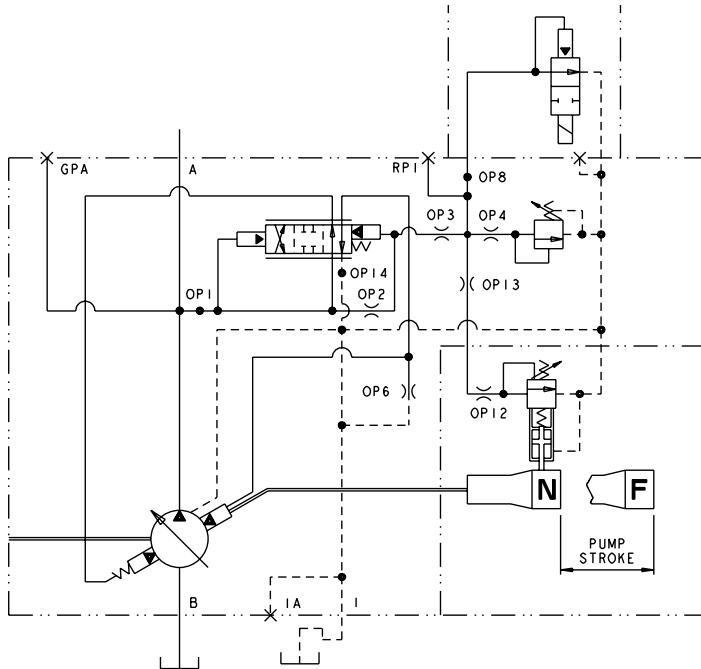
MODEL	MINIMUM HORSEPOWER	MAXIMUM HORSEPOWER	MINIMUM HORSEPOWER TO OBTAIN FLOW AT RATED PRESSURE
-048	20	80	25
-065	20	80	25
-075	20	80	20
-100	18	125	35
-130	18	125	35
-150	50	190	50
-180	50	190	50

ALL HORSEPOWER VALUES ARE FOR 1800 RPM.



SOFT START PRESSURE COMPENSATOR W/HORSEPOWER LIMITER P-C/H

Pump starts “softly” by going quickly at low pressure to a reduced flow setting, thereby reducing start up torque requirements. Automatically reduces delivery, as unit pressure rises, to limit horsepower consumption.

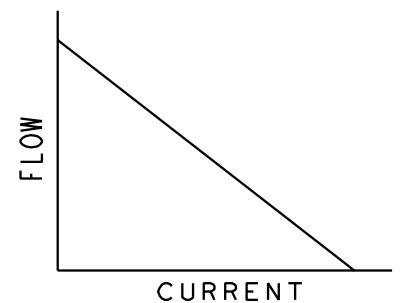
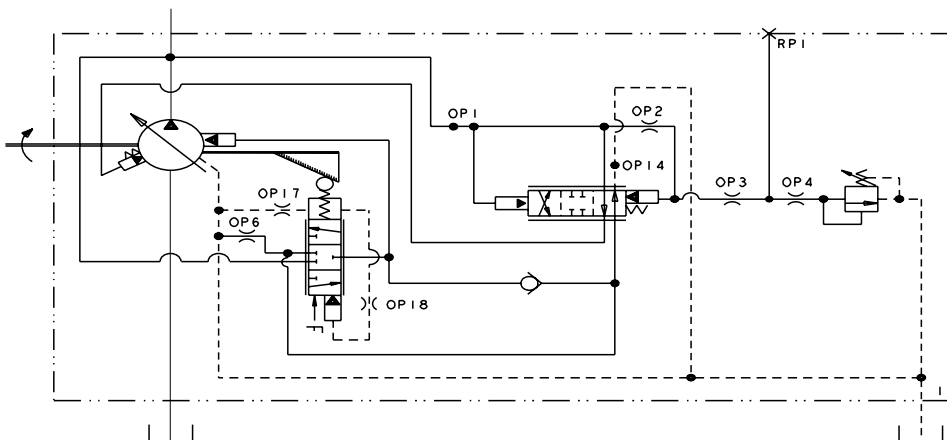


MODEL	MINIMUM HORSEPOWER	MAXIMUM HORSEPOWER	MINIMUM HORSEPOWER TO OBTAIN FLOW AT RATED PRESSURE
-048	20	80	25
-065	20	80	25
-075	20	80	20
-100	18	125	35
-130	18	125	35
-150	50	190	50
-180	50	190	50

ALL HORSEPOWER VALUES ARE FOR 1800 RPM.

ELECTRONIC DISPLACEMENT CONTROL (EDC) P-E

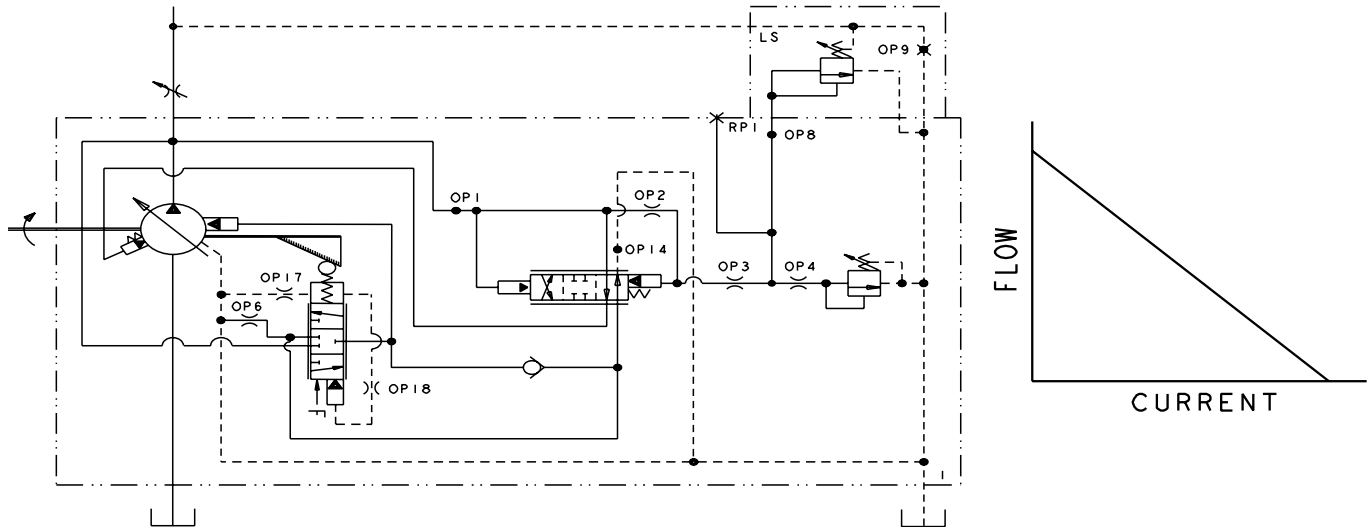
Pump displacement is linearly proportional to an electrical input. An increase in coil current will decrease pump displacement. Pressure compensator control overrides the EDC when preset control pressure setting is reached, then regulates output flow to match the requirements of the system while maintaining preset output pressure.



PVG | CONTROL OPTIONS

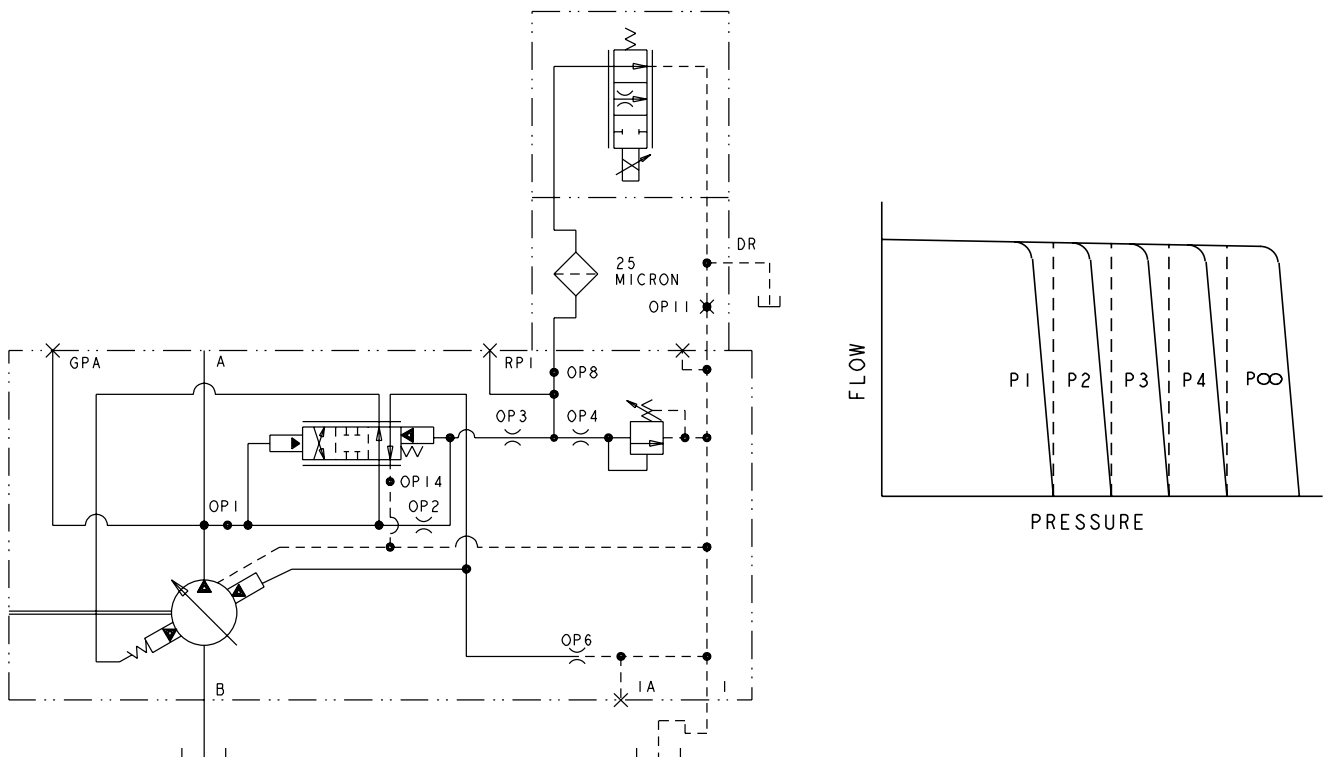
ELECTRONIC DISPLACEMENT CONTROL (EDC) W/LOAD SENSING P-E/F

Pump displacement is linearly proportional to an electrical input. An increase in coil current will decrease pump displacement. Load sensing control overrides the EDC and constant flow output is maintained for a given flow control valve setting regardless of changes in drive speed and/or working pressure. Pressure compensator control overrides the EDC when preset control pressure setting is reached, then regulates output flow to match the requirements of the system while maintaining preset output pressure.



ELECTRONIC PROPORTIONAL PRESSURE COMPENSATOR P-A (N.O) • P-B (N.C)

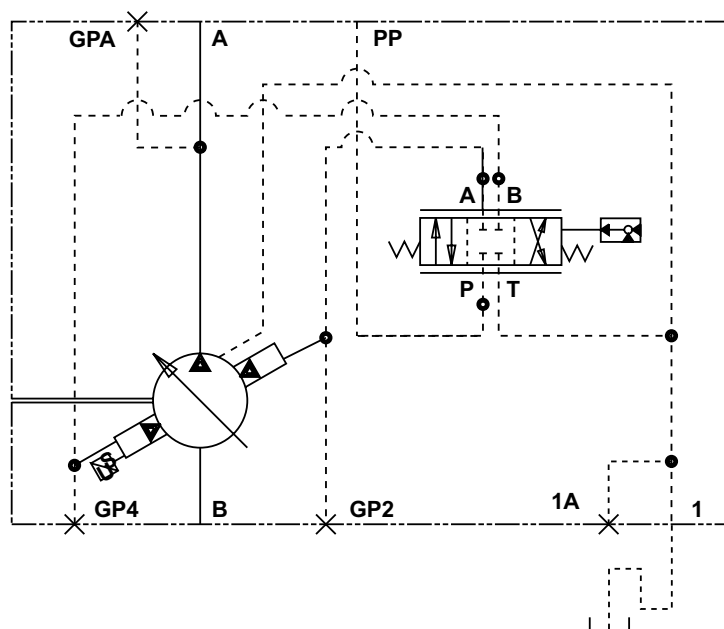
Provides an infinite number of independently remotely adjustable pressure settings in response to an electrical command. (P-A shown)





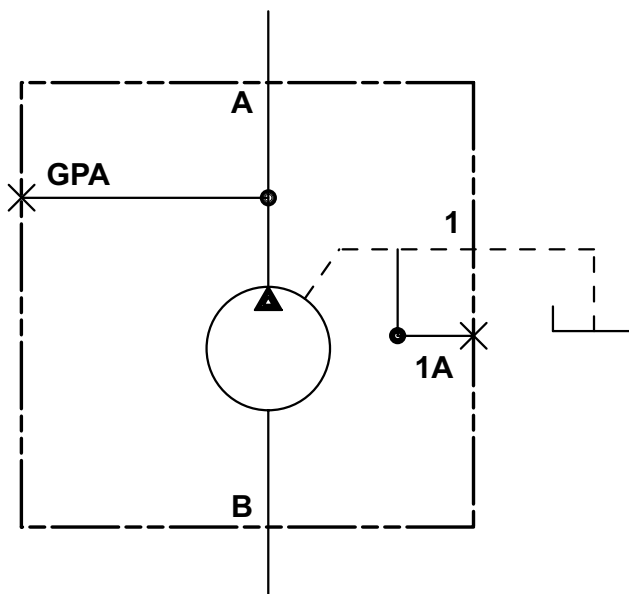
ELECTRONIC SERVO VALVE V-M • V-S

An electrohydraulic servo valve positions the swashplate mechanism with a closed-loop position control (with LVDT feedback).



FIXED VOLUME F

Fixed displacement units available with stroke setting of three quarters and full volume.



PVG | CONTROL MATRIX

CONTROL OPTION	DISPLACEMENT						
	B-FRAME			C-FRAME		D-FRAME	
	PVG-048	PVG-065	PVG-075	PVG-100	PVG-130	PVG-150	PVG-180
P-1NN	√	√	√	√	√	√	√
P-1NN/F	√	√	√	√	√	√	√
P-1NN/K (MIN. STANDBY)	√	√	√	√	√	√	√
P-1NN/H		√	√	√	√	√	√
P-1NN/G		√	√	√	√	√	√
P-ENN		√	√	√	√	√	
P-ENN/F		√	√	√	√	√	
P-FNN		√	√	√	√	√	
P-FNN/F		√	√	√	√	√	
P-2NN		√	√	√	√	√	√
P-2NN/H		√	√	√	√	√	√
P-CNN		√	√	√	√	√	√
P-CNN/H		√	√	√	√	√	√
V				√	√	√	√



THE WORLD DEMANDS

OILGEAR

World Headquarters

☎ 231-929-1660

✉ ussales@oilgear.com

📍 1424 International Drive, Traverse City, MI 49686

🌐 www.oilgear.com

Americas The Oilgear Company Fremont, NE Office

905 South Downing St. Fremont, NE 68025 USA

Oilgear Mexicana S.A.

Calle Argentina 3913, Monterrey, 64930, Mexico

Oilgear do Brasil

Av. Ricardo Bassoli Cezare 1009, 13050-080 Campinas, Brazil

Europe Oilgear Towler UK

37 Burley Road, Leeds, LS3 1JT, United Kingdom

enquiries@oilgear.com

Oilgear Towler S.A.S.

5, Allée des Frères Montgolfier, 77183 Croissy-Beaubourg, France

oilgearfrance@oilgear.com

Oilgear Towler GmbH

Im Gotthelf 8, 65795 Hattersheim, Germany

info@oilgear.de

Oilgear Towler S.A.U.

Entidad Zikuñaga, 62, 20120, Hernani, Spain

Asia Oilgear South Korea

167-3 Techno 2-ro, Yuseong-gu, Daejeon City, 34025, South Korea

spark@oilgear.com

Oilgear China Co., Ltd.

3rd Floor, Bldg. A, No.3500 Xiupu Road, Shanghai, China

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