

ASSEMBLE TO ORDER PUMPS

Custom Built Hydraulic Pump

CHOOSE YOUR BASIC PUMP, SELECT YOUR ACCESSORIES, AND WE WILL ASSEMBLE, TEST AND SHIP YOUR PUMP.



1
PE55A
PE55B
PE90A
PE90B



2
PE55C
PE55D
PE55F
PE90C
PE90D
PE90F



3
PE120M



4
PA55A
PA90A



5
PG55A

10,000 psi

ORDER A "CUSTOM BUILT" HYDRAULIC PUMP

"Assemble to Order" means you can choose a basic pump with gas, air or electric motor. Then select the proper valve, gauge, pressure control, motor control and reservoir. You get a two-stage pump that gives high oil volume for fast cylinder approach (and return with double-acting cylinders) in the first stage and high pressure in the second stage.

1 1/8 HP UNIVERSAL MOTOR

1 These motors start under full load and are suitable for operation up to 5,000 or 10,000 psi. The motor is 1 1/8 hp, 12,000 rpm, 115 or 230 volt (specify), 50/60 cycle AC single phase (25 amp draw at 115V). With proper valve they can be used with single or double-acting cylinders. Remote control available.

2 1 1/2 HP JET MOTOR, SINGLE & THREE-PHASE

2 Feature low noise level, moderate speed for long service and are ideal for fixed applications. Motor is 1 1/2 hp, 3,450 rpm, 115 or 230 volt, 50 or 60 cycle (specify), AC single phase with thermal overload switch. Can be used with single or double-acting cylinders and equipped with remote control. Also available in 230/460 volt, three-phase (specify).

NOTE: These do not start under full load unless valve is in "neutral" (requires open or tandem center valve) and are not recommended for frequent starting and stopping.

3 3 HP JET MOTOR, THREE-PHASE

3 Gives low noise level and long life due to its moderate operating speed. Ideal for fixed installations. Consists of basic 10,000 psi pump, jet pump motor: 3 hp, 3,450 rpm, 230/460 volt, 60 or 50 cycle (specify). AC three-phase, with thermal overload switch. Equipped with internal and external relief valve. Will start under load.

4 3 HP AIR MOTOR

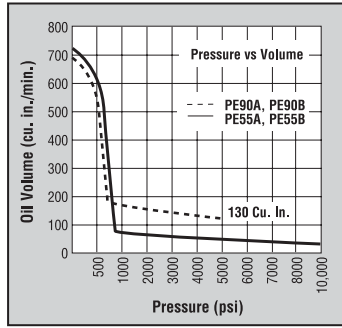
4 This pump is ideal for use where electricity is unavailable or cannot be used. The 5,000 or 10,000 psi pump has a 3 hp air driven motor at 3,000 rpm (optimum performance based on 80 psi air pressure and 50 cfm at the pump). You can drive single or double-acting cylinders with the correct valve.

NOTE: 80 psi air supply required to start under full load.

5 GASOLINE ENGINE

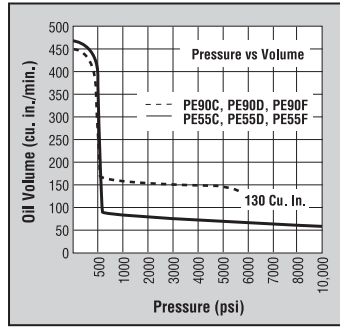
5 This version is perfect when electricity and air are unavailable. It is capable of continuous operation at full pressure. Consists of basic 10,000 psi pump, 4-cycle Briggs & Stratton "Diamond Edge" gasoline engine, developing 6 hp. As with all these pumps, this unit can be valved for use with either single or double-acting cylinders.





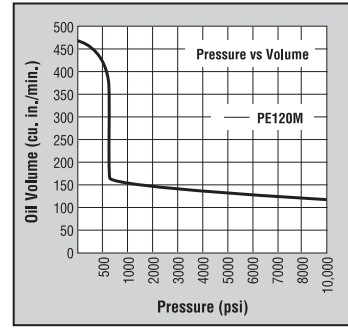
dBA @ idle and 10,000 psi – 90/95
dBA @ idle and 5,000 psi – 90/95

2



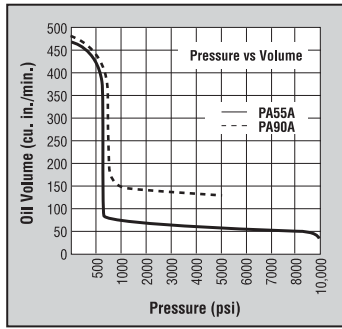
dBA @ idle and 10,000 psi – 80/85

3



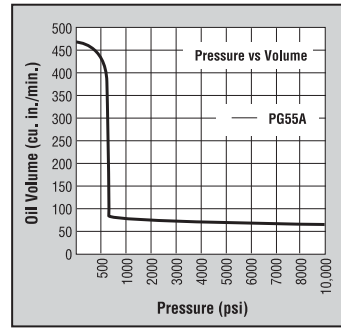
dBA @ idle and 10,000 psi – 80/85

4



dBA @ idle and 10,000 psi – 83/88
dBA @ idle and 5,000 psi – 83/88

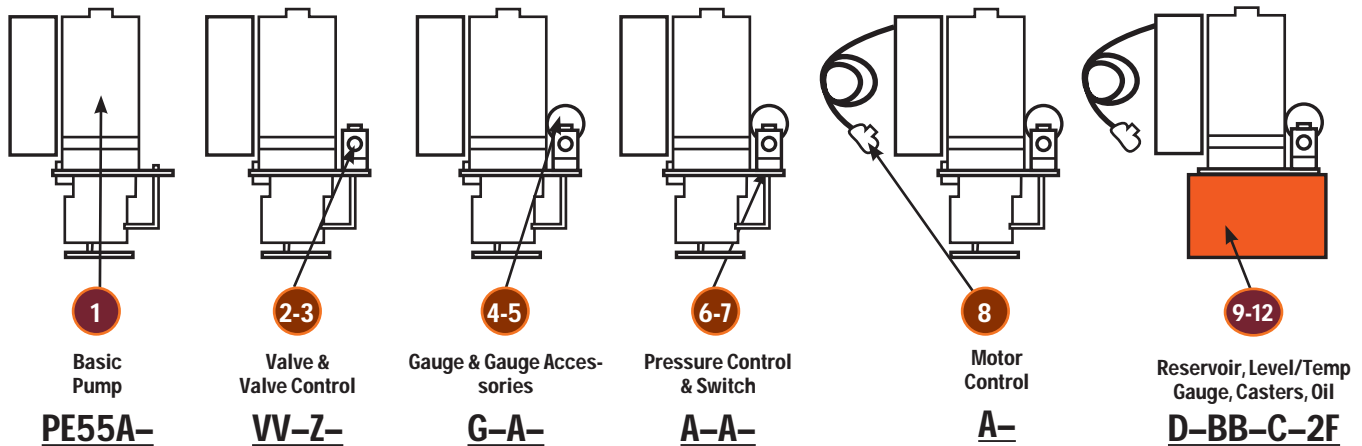
5



“ASSEMBLE TO ORDER” PUMP HOW TO ORDER YOUR “CUSTOM” HYDRAULIC PUMP...

You can choose from pre-engineered, off-the-shelf components to customize your pump. All the components are listed in table form, with key letters or numbers on pages

102-103. Complete instructions guide you so you can determine what is needed to complete a pump assembly. Shown below is an example of a custom-built pump.



Pump No. PE55A-VV-Z-G-A-A-A-D-BB-C-2F is a 10,000 psi two-speed pump with a 115 volt, 50-60Hz, single phase, 1 $\frac{1}{8}$ hp, 12,000 rpm motor; a 9512 4-way solenoid valve with a 202778 remote hand control, a 9041 pressure gauge, no

gauge accessories, standard pressure control, standard On-Off-Pulse motor control, 400630R9 2-gallon reservoir, a 350431 oil level/temperature gauge, 10494 casters, and 2 gallons of standard hydraulic oil.

See next two pages for pump components

ASSEMBLE TO ORDER PUMPS

Component Specification Chart

TO BUILD YOUR PUMP, FILL IN KEY LETTERS FROM CHARTS

1 Basic Pump	2 Select Valve	3 Select Valve Control	4 Select Gauge	5 Select Gauge Accessories	6 Pressure Control
7 Pressure Switch	8 Motor Control	9 Reservoir	10 Level/Tem Gauge	11 Choose Casters	12 Select Oil

Use the charts numbered from 1-12 below to select the pump, valve, gauge and other accessories to suit your needs. For the pump, fill in the basic number plus key letter in block 1 above and the key letter only in the blocks 2-12 above for any of the other items. Refer to the appropriate pages in this catalog for more specific information on the products you need.

1 BASIC PUMP (See pages 82-95)

BASIC PUMP NUMBERS						SPECIFICATIONS		
PE55 (10,000 psi)	PE90 (5,000 psi)	PE120 (10,000 psi)	PA55 (10,000 psi)	PA90 (5,000 psi)	PG55 (10,000 psi)	Power Source	NOTE: Customer must specify voltage required. rpm	hp
A or AC*	A or AC*					115V-60 Hz, 1Ø	12,000	1½
						110V-50 Hz, 1Ø	12,000	1½
B or BC*	B or BC*					230V-60 Hz, 1Ø	12,000	1½
						220V-50 Hz, 1Ø	12,000	1½
† C or CC*	† C or CC*					115V-60 Hz, 1Ø	3,450	1½
† C50	† C50					110V-50 Hz, 1Ø	2,850	1½
† D or DC*	† D or DC*					230V-60 Hz, 1Ø	3,450	1½
† D50	† D50					220V-50 Hz, 1Ø	2,850	1½
† F60 **	† F60**					208, 230/460V-60 Hz, 3Ø	3,450	1½
† F50 **	† F50**					220/380V-50 Hz, 3Ø	2,850	1½
		M60 **				208, 230/460V-60 Hz, 3Ø	3,450	3
		M50 **				220/380V-50 Hz, 3Ø	2,850	3
			A	A		Air Motor	3,000	3
					A	Gas Engine	3,600	6

*Suffixes AC, BC, CC & DC indicate pumps for Canadian orders only.

NOTE: All electric units have 24 volt secondary circuit.

**Voltage Specification Required.

† These pumps do not start under full load unless valve is in "neutral" position (requires open or tandem center valve) and are not recommended for frequent starting and stopping.

2 VALVE (See pages 122-129)

Manifold/Manual/Air Operated Directional Valves	Function	Manifold/Manual/Air Operated Directional Valves	Function
AB 9628 manual, tandem center	4-way, 3 pos. valves	O 9609 manual, pressure compensated flow control	3-way, 4 pos.
AC 9632 manual "twin" tandem and open center		R 9506 manual, tandem center <i>Posi-Check®</i>	
A None	—	RR 9511 manual, open center	4-way, 3 pos. valves
B 9626 manifold	Manifold	S 9500 manual, tandem center	
C 9584 manual	3-way,	T 9507 manual, closed center <i>Posi-Check®</i>	
D 9582 manual	2 pos. valves	U 9501 manual, closed center	
E 9610 automatic, pilot operated	valves	Solenoid Operated Directional Valves	
G 9504 manual	3/4-way,	FF 9569 solenoid operated - 24 volt	3-way, 2 pos.
JJ 9594 air operated	2 pos. valves	HH 9572 solenoid operated - 24 volt	3/4-way, 2 pos.
L 9502 manual, closed center "non-interflow"	3-way,	PP 9599 solenoid operated - 24 volt	3-way, 3 pos.
M 9520 manual, tandem center <i>Posi-Check®</i>	3 pos. valves	VV 9512 solenoid operated - 24 volt	4-way,
N 9576 manual, metering tandem center	valves	WW 9615 solenoid operated - 24 volt	3 pos. valves

3 VALVE CONTROL (See page 130)

Valve Remote Control	Use with Valve	Valve Remote Control	Use with Valve
A None	—	Z 202778 remote hand control, 10 ft.	9512 or 9615
X 304718 remote hand control, 10 ft.	9572	ZF 309653 remote foot control, 10 ft.	9512, 9615,
XF 309652 remote foot control, 10 ft.	9572		9569 or 9599
Y 202777 remote hand control, 10 ft.	9569 or 9599	ZZ 209593 remote hand control, 12 ft.	9594

4 GAUGE (See page 110-111)

Pressure Gauges	
A	None
B	Other – Specify
G	9041 0-10,000 psi – 0-689 Bar (2½" dia.)
H	9040 0-10,000 psi – 0-689 Bar (Liquid) (2½" dia.)
J	9051 0-10,000 psi – 0-689 Bar (4" dia.)
M	9052 0-10,000 psi – 0-689 Bar (Liquid) (4" dia.)

6 PRESSURE CONTROL (See page 119)

Pressure Controls	
A	With standard external pressure regulator
C	Other – specify
D	350199 premium external pressure regulator. See Power Team Catalog product No. 9633 for details.

NOTE: Pressure controls are factory pre-set at 10,000 psi unless otherwise specified.

8 MOTOR CONTROL (See page 130)

Electric Motor Controls	
A	Standard On/Off/Pulse control (does not include remote switch) for A, B, C, D, F and M electric pumps. Also used for remote controlled solenoid valves.
B	None
C	25017 remote motor hand switch, 10 ft.
D	203225 remote motor hand switch, 10 ft. (heavy duty)
E	10461 remote motor foot switch, 10 ft.
Air Motor Controls	
AA	Other
B	None
P	27876 hand motor control (for PA55 & PA90 series)
Q	27877 foot motor control (for PA55 & PA90 series)

10 OIL LEVEL/TEMP. GAUGE (SEE PAGE 132)

Oil Level/Temperature Gauge	
A	None
BB	350431 oil level/temperature gauge

11 CASTERS (See page 132)

Casters	
A	None
C	10494 caster for use with 40063OR9 reservoir (Specify quantity of four)

5 GAUGE ACCESSORY (See page 111)

Gauge Accessories	
A	None
N	9049 pulsation dampener – All dry gauges

7 PRESSURE SWITCH (See page 131)

Pressure Switch	
A	None
B	9625 electric pressure switch (500-10,000 psi) NOTE: Pressure switch is factory pre-set at 10,000 psi unless otherwise specified.
C	9641 pilot operated air control valve – N.C.
D	9643 pilot operated air control valve – N.O.

9 RESERVOIR (See page 133)

Reservoirs	Capacity	
A	None	
B	Other – Specify	
D	40063OR9 – PE55, PE90, PE120, PA55 and PA90 series	2½ gal.
E	61165† – PE55, PE90, PE120, PA55 and PA90 series (Oil temperatures in excess of 150° F. may cause permanent failure of the thermoplastic reservoir)	2 gal.
F	RP22‡ – PE55, PE90, PE120, PA55 and PA90 series	2½ gal.
H	61799OR9 Same as D except with drain port	2½ gal.
J	RP50 – PE55, PE90, PE120, PA55 and PA90 series	5 gal.
K	40137OR9 – PG55 series	5 gal.
P	209124 – PE55, PE90, PE120, PA55 and PA90 series	7 gal.
V	RP100 – PE55, PE90, PE120, PA55 and PA90 series	10 gal.
W	RP101 – PG55 series	10 gal.

NOTE: Includes cover adapter and misc. accessories when applicable.
†High density polyethylene.
‡Aluminum.

12 OIL (See page 112)

Oil	
E	Ship pump without oil
F	9637 1 gal. standard hydraulic oil
G	9638 2½ gal. standard hydraulic oil
Q	9639 1 gal. Flame-Out hydraulic oil
R	9640 2½ gal. Flame-Out hydraulic oil
U	9645 1 gal. biodegradable hydraulic oil
V	9646 2½ gal. biodegradable hydraulic oil

NOTE: Select type of hydraulic oil and specify quantity.

