

The “Assemble to Order” System

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. We will assemble it, test it and ship it to you.



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 .84 kW universal motor

These motors start under full load and are suitable for operation up to 350 or 700 bar. The motor is .84 kW, 12,000 rpm, 115 or 230 volt (specify), 50/60 cycle A.C. single phase (13 amp draw at 220V.). With proper valve they can be used with single- or double-acting cylinders. Remote control available.

2 1.12 kW jet motor, single & three-phase

Feature low noise level, moderate speed for long service and are ideal for fixed applications. Motor is 1.12 kW, 2,850 rpm, 220 volt, 50 cycle, A.C. 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 2.24 kW jet motor, three-phase

Gives low noise level and long life due to its moderate operating speed. Ideal for fixed installations. Consists of basic 700 bar pump, jet pump motor: 2.24 kW, 2,850 rpm, 220/380 volt, 50 cycle (specify). A.C. three-phase, with thermal overload switch. Equipped with internal and external relief valve. Will start under load.

4 2.24 kW air motor

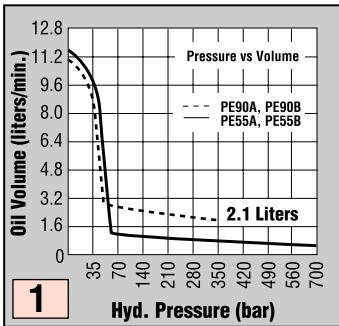
This pump is ideal for use where electricity is unavailable or cannot be used. The 350 or 700 bar pump has a 2.24 kW air driven motor at 3,000 rpm (optimum performance based on 6 bar air pressure and 1.4 cu. m/min. at the pump). You can drive single- or double- acting cylinders with the correct valve.

NOTE: 6 bar air supply required to start under full load.

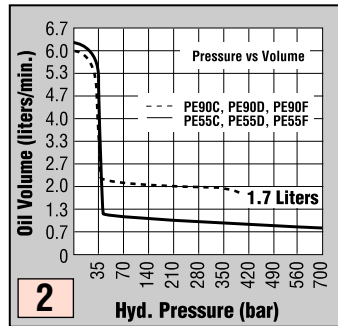
5 Gasoline engine

This version is perfect when electricity and air are unavailable. It is capable of continuous operation at full pressure. Consists of basic 700 bar pump, 4-cycle Briggs & Stratton “Diamond Edge” gasoline engine, developing 4.47 kW. As with all these pumps, this unit can be valved for use with either single- or double-acting cylinders.

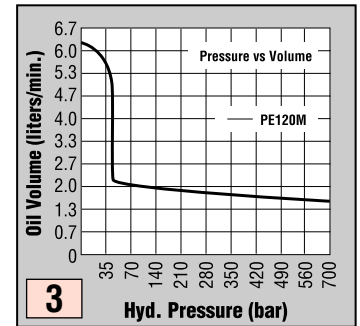
PERFORMANCE



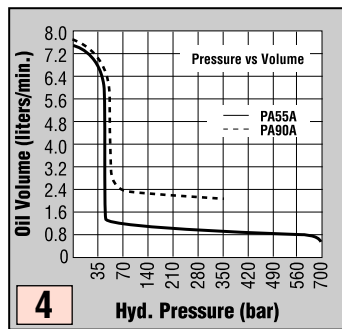
dBA @ idle and 700 bar - 90/95
dBA @ idle and 350 bar - 90/95



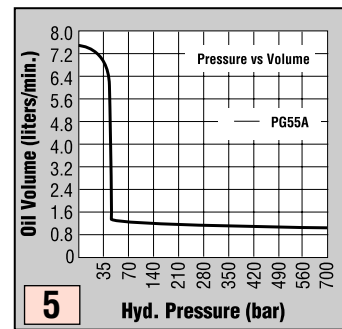
dBA @ idle and 700 bar - 80/85



dBA @ idle and 700 bar - 80/85



dBA @ idle and 700 bar - 83/88
dBA @ idle and 350 bar - 83/88

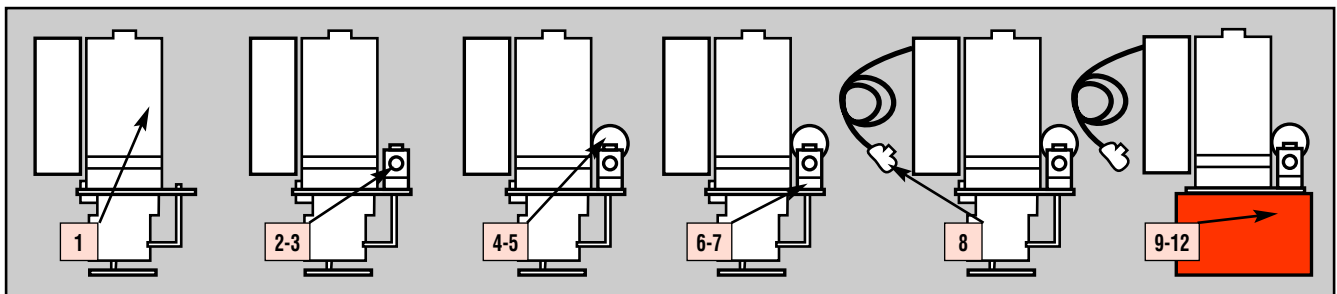


“Assemble to Order” System

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 72-73. Complete

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



1
Basic Pump
PE55C50-

2-3
Valve & Valve Control
VV-Z-

4-5
Gauge & Gauge Accessories
G-A-

6-7
Pressure Control & Switch
A-A-

8
Motor Control
A-

9-12
Reservoir, Level/Temp Gauge, Casters, Oil
D-BB-C-2F

Pump No. **PE55C50-VV-Z-G-A-A-A-D-BB-C-2F** is a 700 bar two-speed pump with a 110 volt, 50 Hz, single phase, 1.12 kW, 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 7.6 liter reservoir, a 350431 oil level/temperature gauge, 10494 casters, and 7.6 liters of standard hydraulic oil.

See next two pages for pump components

The "Assemble to Order" System

Pump 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/Temp Gauge	11 Choose Casters	12 Select Oil

Use the charts numbered from 1-12 below to select the pump, valve, gauge and other miscellaneous 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 22-69)

BASIC PUMP NUMBERS						SPECIFICATIONS		
PE55	PE90	PE120	PA55	PA90	PG55	NOTE: Customer must specify voltage required.		
700 bar	350 bar	700 bar	700 bar	350 bar	700 bar	Power Source	rpm	kW
A or AC*	A or AC*					115V-60 Hz, 1	12,000	.84
						110V-50 Hz, 1	12,000	.84
B or BC*	B or BC*					230V-60 Hz, 1	12,000	.84
						220V-50 Hz, 1	12,000	.84
C or CC*	C or CC*					115V-60 Hz, 1	3,450	1.12
C50	C50					110V-50 Hz, 1	2,850	1.12
D or DC*	D or DC*					230V-60 Hz, 1	3,450	1.12
D50	D50					220V-50 Hz, 1	2,850	1.12
F60 **	F60**					208, 230/460V-60 Hz, 3	3,450	1.12
F50 **	F50**					220/380V-50 Hz, 3	2,850	1.12
		M60 **				208, 230/460V-60 Hz, 3	3,450	2.24
		M50 **				220/380V-50 Hz, 3	2,850	2.24
			A	A		Air Motor	3,000	2.24
					A	Gas Engine	3,600	4.47

* Suffixes AC, BC, CC & DC indicate pumps for Canadian orders only. **NOTE:** All electric units have 24 volt secondary circuit.

** Specify voltage 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 144-155)

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 "Posi-Check®"	
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 "Posi-Check®"	
D	9582 manual	2 pos. valves	U	9501 manual, closed center	
E	9610 automatic, pilot operated		Solenoid Operated Directional Valves		Function
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 "Posi-Check®"	3 pos. valves	VV	9512 solenoid operated - 24 volt	4-way,
N	9576 manual, metering tandem center		WW	9615 solenoid operated - 24 volt	3 pos. valves

3 VALVE CONTROL (See page 162)

Valve Remote Control		Use with Valve	Valve Remote Control		Use with Valve
A	None		Z	202778 remote hand control, 3.1 m	9512 or 9615
X	304718 remote hand control, 3.1 m	9572	ZF	309653 remote foot control, 3.1 m	9512, 9615, 9569 or 9599
XF	309652 remote foot control, 3.1 m	9572			
Y	202777 remote hand control, 3.1 m	9569 or 9599	ZZ	209593 remote hand control, 3.7 m	9594

4 GAUGE (See page 76-77)

Pressure Gauges	
A	None
B	Other Specify
G	9041 0-10,000 psi 0-689 Bar (63.5 mm dia.)
H	9040 0-10,000 psi 0-689 Bar (Liquid) (63.5 mm dia.)
J	9051 0-10,000 psi 0-689 Bar (102 mm dia.)
K	9087 0-6,000 psi (102 mm dia.)
M	9052 0-10,000 psi 0-689 Bar (Liquid) (102 mm dia.)

6 PRESSURE CONTROL (See page 155)

NOTE: Pressure controls are factory pre-set at 700 bar unless otherwise specified.

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.

8 MOTOR CONTROL (See page 162)

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, 3.1 m
D	203225 remote motor hand switch, 3.1 m (heavy duty)
E	10461 remote motor foot switch, 3.1 m
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 164)

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

11 CASTERS (See page 164)

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

5 GAUGE ACCESSORY (See page 76)

Gauge Accessories	
A	None
N	9049 pulsation dampener All dry gauges

7 PRESSURE SWITCH (See page 163)

Pressure Switch	
A	None
B	9625 electric pressure switch (35-700 bar) NOTE: Pressure switch is factory pre-set at 700 bar 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 165)

Reservoirs	Capacity	
A	None	
B	Other Specify	
D	40063OR9 PE55, PE90, PE120, PA55 and PA90 series	9.5 L
E	61165 PE55, PE90, PE120, PA55 and PA90 series (Oil temperatures in excess of 65.5° C. may cause permanent failure of the thermoplastic reservoir)	7.6 L
F	RP22 PE55, PE90, PE120, PA55 and PA90 series	9.5 L
H	61799OR9 Same as D except with drain port	9.5 L
J	RP50 PE55, PE90, PE120, PA55 and PA90 series	19 L
K	40137OR9 PG55 series	19 L
P	209124 PE55, PE90, PE120, PA55 and PA90 series	26.5 L
V	RP100 PE55, PE90, PE120, PA55 and PA90 series	37.9 L
W	RP101 PG55 series	37.9 L

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

12 OIL (See page 78)

Oil	
E	Ship pump without oil
F	9637 3.8 L standard hydraulic oil
G	9638 9.5 L standard hydraulic oil
Q	9639 3.8 L Flame-Out hydraulic oil
R	9640 9.5 L Flame-Out hydraulic oil
U	9645 3.8 L biodegradable hydraulic oil
V	9646 9.5 L biodegradable hydraulic oil

NOTE: Select type of hydraulic oil and specify quantity.