# MARKET LEADING HIGH PRESSURE POWER UNITS FOR A WIDE ARRAY OF APPLICATIONS AND USES.

Every power unit goes through a rigorous assembly and test process to ensure the highest level of performance:

- Power units are available in manual or powered configurations. Powered options include electric, air, and gas.
- A wide array of reservoir sizes from under 0,99 I to 152 I
- Variety of valve configurations, such as dump, 2-way,
   3-way and 4-way in manual and solenoid configurations,
- Whether you are seeking a manual, electrical or an air power pump, Power Team pumps can generate flows up to 420 cm<sup>3</sup> / minute @ 700 Bar.







Section /	Power	Flow Stages	Flow @ Max	Page(s)
Series	Source	-	Pressure	
Introduction	All	All	All	45-48
Р	Manual	Single & Two-Speed	197-901 cm <sup>2</sup>	49-51
RPS	Manual	Single & Two-Speed	_	52
PA6	Air	Single-Acting	98 cm <sup>2</sup>	53-54
PA6D	Air	Single-Speed	98 cm <sup>2</sup>	55-56
PA9	Air	Single-Speed	148 cm <sup>2</sup>	57-58
PA60	Air	Two-Speed	98 cm²	59-60
PA50	Air	Single-Speed	459 cm <sup>2</sup>	61-62
PA17	Air	Two-Speed	279 cm <sup>2</sup>	63-64
PA46/55	Air	Two-Speed	754-901 cm <sup>2</sup>	65-66
PUA / PMA	Air	Single-Speed	_	67-70
РВ	Battery	Two-Speed	98 cm <sup>2</sup>	71-72
PE10	Electric	Two-Speed	164 cm <sup>2</sup>	73-74
PE17	Electric	Two-Speed	279 cm <sup>2</sup>	75-76
PE18	Electric	Two-Speed	295 cm <sup>2</sup>	77-78
PE21	Electric	Two-Speed	361 cm <sup>2</sup>	79-80
PED	Electric	Two-Speed	410 cm <sup>2</sup>	81-82
PE30	Electric	Two-Speed	492 cm <sup>2</sup>	83-84
PE46	Electric	Two-Speed	754 cm <sup>2</sup>	85-86
PE55	Electric	Two-Speed	901 cm <sup>2</sup>	87-88
PE60	Electric	Two-Speed	918 cm <sup>2</sup>	89-90
PQ60	Electric	Two-Speed	983 cm <sup>2</sup>	91-92
PQ120	Electric	Two-Speed	1966 cm <sup>2</sup>	93-94
PE400	Electric	Two-Speed	6883 cm <sup>2</sup>	95-96
MCS	Electric	Two-Speed	901-1966 cm <sup>2</sup>	97-98
PE-NUT	Electric	Two-Speed	492 cm <sup>2</sup>	99
PG120_CP	Gas	Two-Speed	2130 cm <sup>2</sup>	100
PG30/55	Gas	Two-Speed	492-901 cm <sup>2</sup>	101-102
PG120-PG400	Gas	Two-Speed	2130-6883 cm <sup>2</sup>	103-104
HB Intensifier	Hydraulic		Press. Ratio 5:1	105
Assemble to Order	Air, Elec., Gas	Custom Built		107-110





#### **SELECTING THE RIGHT PUMP:**

Step 1 Select the hydraulic pump that best suits the application.

Step 2 Select the series of pump with adequate oil output and reservoir capacity to power tool.

 $\textbf{Step 3} \ \ \text{Select pump within series with the valve option that is best suited to the tool and application.}$ 

#### **PUMP SIZING CONSIDERATIONS:**

- 1. What maximum system operating pressure (bar) is required?
- What volume of oil delivery is required? (For manual pumps, cm³ of oil per handle stroke. For powered pumps, cm³/min. of oil).
- Is a single or two-speed pump required? (Two-speed pumps deliver high oil volume at low pressure for rapid cylinder piston advance, then shift to high pressure, low volume stage under load).
- 4. What is the preferred source of power?
  - Manual (hand or foot operated): Provides portability, can be used where electricity or shop air are not available.
  - b. Air/Hydraulic: Uses shop air or a portable air compressor.
  - c. Electric/Hydraulic: What voltage is available? Is a battery operated pump preferred?
  - d. Gasoline Engine/Hydraulic: Powers high-output pumps at remote job sites where air or electricity are unavailable.

- 5. Is portability of the pump a factor to consider?
- 6. Will the pump be used intermittently, or will it need to provide high-cycle operation? Does the application require that the pump be capable of starting under load?
- Is fluid heat build-up a factor in your application? High-cycle applications may require a larger capacity oil reservoir for cooling.
- Will the application require large displacement or multiple cylinders? Reservoir size and pump output levels will be factors to consider.
- Does the working environment require a pump having a low operating noise (dBA) level?
- 10. Must the pump operate in a spark-free environment?
- 11. Do you need CE mark?



#### Manually-operated hydraulic pumps:



- P12, P23, P55 These single-speed pumps are for use with single-acting cylinders.
- P19/P19L, P59/P59L, P59F, P157, P159, P300, P460 These two-speed pumps are used with single-acting cylinders. The two-speed feature provides high oil volume for fast cylinder piston approach to the work, then the pump automatically shifts to the high pressure stage. This reduces the number of pump handle strokes required.
- P157D, P159D, P300D, P460D These two-speed pumps are used with double-acting cylinders.

#### Air / hydraulic pumps:

Used where air is the preferred energy source or where electricity is not available. Ideal for use in petrochemical, mining or other flammable or explosive environments.



- PA6 Series These single-speed pumps drive single or double-acting cylinders.
- PA9 Series These new single-speed pumps drive single-acting cylinders and are ideal for powering portable hydraulic tools.
- PA50 Series These single-speed pumps drive single or double-acting low pressure (221 bar) cylinders.
- PA60 This two-speed pump is equipped with a manifold to operate multiple cylinders, and provides a 7.6 I reservoir.
- PA64 Similar to PA60, this two-speed pump drives single or double-acting cylinders.
- PA172 and PA174 These "economy" two-speed pumps drive single or double-acting cylinders, depending on the model chosen. Provide a low weight-to-output ratio.
- PA462 and PA464 Series These two-speed pumps drive single or double-acting cylinders, depending on the model selected. They offer high speed cylinder piston advance.
- PA554 This two-speed pump drives single or double-acting cylinders, delivering a high volume of oil.

#### Electric / Hydraulic pumps:

All of the following pumps are two-speed models, and can be used to drive single or double-acting cylinders.



- PE/PB10 Series"Quarter Horse" Series These pumps feature a 1/4 hp electric motor. A battery-powered version is available. Having a low noise level and weighing just 9,1 kg. They are ideal for powering portable hydraulic spreaders, nut splitters, pipe flange spreaders and other tools.
- PE17 Series CSA rated for intermittent duty, these feature a 1/2 hp, single-phase induction motor with a low noise level (67-81 dBA). Smaller generators and low amperage circuits can be used as a power source.
- PE46 Series Powered by a 1-1/2 hp, single-phase induction motor, operates at a moderate noise level of 77-81 dBA. CSA rated for intermittent duty.
- PE18 Series CSA rated for intermittent duty, these feature a 1/2 hp, single-phase universal motor with a noise level of 85-90 dBA. Provide high-performance at a low price. Has low amperage draw.
- **PE30 Series** Equipped with a 1 hp, single-phase permanent magnet motor, have a noise level of only 82-87 dBA. CSA rated for intermittent duty, and requires a relatively low voltage. Ideal for use in general construction applications. Roll cage/handle protects the motor and controls.
- PE55 and PED25 Series Equipped with a 1-1/8 hp, single-phase universal motor, have a 90-95 dBA noise level. Offer the best weight to performance ratio of any Power Team electric/ hydraulic pump. CSA rated for intermittent duty. The PED25 versions are "dual flow" pumps which deliver the same low and high pressures to both valves, and have a noise level of 80-85 dBA. They have a 1-1/2 hp induction motor.



#### ► Electric / Hydraulic pumps: (CONT.)



- PE60 Series These Vanguard® Supreme® pumps provide trouble-free service in the most severe working environments. Powered by a 1-1/8 hp, single-phase motor, has a moderate noise level of 80-85 dBA. Starts under load even at the reduced voltages encountered on construction sites. High-output pumps, ideal for use with post-tensioning/pre-stressing jacks and other high-pressure hydraulic tools.
- "Custom-Built" Pumps Power Team offers you "assemble to order" electric/hydraulic pumps to suit unique applications. You can choose from pre-engineered, off-the-shelf components to customize your pump.
- PE21 Series Ideal for heavy-duty, extended-cycle applications. Powered by a 1 hp, single-phase motor, pump operates at a very low noise level of 70 dBA. Pump automatically shuts down in the event of a power failure. CSA rated for intermittent duty.
- "Quiet" Pumps Our PQ60 and PQ120 series operate at a very low noise level of between 73-78 dBA. The PQ60 has a 2 hp (single-phase) motor; the PQ120 has a 3 hp (three-phase) motor. These pumps are designed for heavy-duty, extended cycle operations. CSA rated for intermittent duty.
- PE400 Series High-flow units deliver a large volume of high pressure oil for heavy construction and maintenance operations employing high tonnage cylinders. The PE400 is powered by a 10 hp, three-phase motor. Low noise rating of 73-80 dBA.

#### Gasoline-driven hydraulic pumps:

These two-speed pumps are ideal for use in remote applications, such as construction sites. May be used with single or double-acting cylinders.



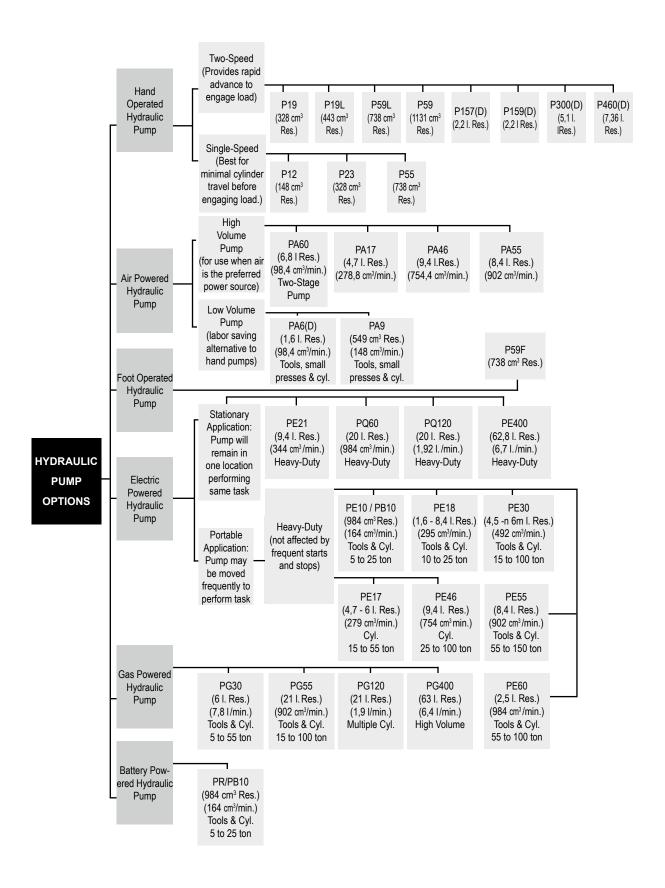
- **PG30 Series** Powered by a 2-cycle, 2 hp Honda engine, these have an integral, protective "roll cage" and adequate reservoir capacity for cylinders up to 100 tons capacity or more. Readily portable, and popular in the railroad, rescue and construction markets.
- PG55 Series With a 4-cycle, 4 hp Briggs & Stratton engine, this pump is based on our popular Vanguard® Series hydraulic system. It has a generous 19 I reservoir capacity.
- PG120 Series Powered by a 4-cycle, 5.5 hp Honda engine. Has a 19 I reservoir, and is capable of handling multiple-cylinder lifting tasks. Ideal for the structure moving, pier setting, bridge lifting and concrete contracting industries.
- **PG4004** Featuring a 4-cycle, 18 hp Honda engine, this unit has a big 75,7 I reservoir. Rugged steel "roll cage" has a hook on top and swivel casters for ease of mobility. Popular for concrete stressing applications.

#### Hydraulic intensifier:



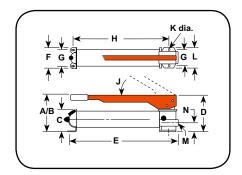
■ HB Series – Turns low pressure hydraulic pumps into high pressure power sources to operate single or double-acting cylinders and tools such as crimper's, spreaders, cutters, etc. Compact and portable for use inside a utility vehicle aerial bucket or stowing in a vehicle.





Model Shown: **P55, P12, P23** 





#### Features

# STEEL HAND PUMPS BEST SUITED FOR MRO APPLICATIONS.

- All metal construction won't burn through in welding environments.
- Formed metal handle provides rigidity, and reduces operator fatigue with grip.
- Convenient fill port enables pumps to be filled in a horizontal or vertical position, excluding P12.
- Fill cap seal acts as safety valve preventing overpressurizing of reservoir.
- Large valve knob gives added control for slowly metering loads down.



#### **Pump Protection System**



Power Team hand pumps, with the angled fill port, have a built in "relief valve" protection system. This system is designed to protect over-pressurization of the reservoir from sudden back pressure. This system also works as a seal to prevent oil leaks only fill to bottom of threads.

Wt. (kg)

# For Use With: Kit Order No. P55, P59 FK59

#### Technical Dimensions

Order	Α	В	С	D	Е	F	G	Н	J	K	L	M	N
No.	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(deg.)	(mm)	(mm)	(in.)	(mm)
P12	101,6	330,2	60,0	101,6	342,9	85,7	55,6	292,1	45°	4,8	85,7	3/8 NPTF	28,6
P19	139,7	371,5	73,0	115,9	347,7	101,6	82,6	281,0	53°	7,9	101,6	3/8 NPTF	35,7
P23*	158,8	330,2	88,9	141,3	346,1	108,0	82,6	261,6	38°	7,9	120,7	3/8 NPTF	41,3
P55	165,1	533,4	88,9	141,3	584,2	108,0	82,6	501,7	38°	7,9	120,7	3/8 NPTF	41,3
P59	177,8	533,4	88,9	127,0	584,2	108,0	82,6	501,7	38°	7,9	120,7	3/8 NPTF	41,3
P59F	88,9	425,5	88,9	152,4	590,6	108,0	82,6	514,4	_	7,9	114,3	3/8 NPTF	42,9

<sup>\*</sup>The P23 pump maximum pressure is 210 bar only.

#### Ordering Information

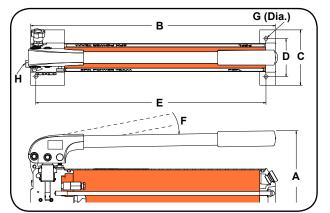
For Use	Speed	Order	Volume p	er Stroke	Max. P	ressure	Handle	Rese	rvoir	Oil	Prod.
With	Speeu	No.	LP	HP	LP	HP	Effort	Oil Cap.	Usable Oil Cap.	Port	Wt.
			(cm³)	(cm³)	(bar)	(bar)	(kg)	(cm³)	(cm³)	(cm)	(kg)
	1	P12	_	1,1	_	700	34	197	148	3/8 NPTF	2,6
	2	P19	5,0	1,2	22	700	45	400	328	3/8 NPTF	3,0
Single-	1	P23	_	2,6	-	210	32	390	333	3/8 NPTF	5,5
Acting Cylinders	1	P55	_	2,6	-	700	66	902	738	3/8 NPTF	7,2
,	2	P59	10,9	2,6	22	700	66	902	738	3/8 NPTF	7,8
	2	P59F	9,0	2,1	22	700	55	902	738	3/8 NPTF	6,4

LP = Low Pressure - HP = High Pressure

#### P19L, P59L, P59L-1500, P59L-1500G







#### Features

# PUMP AUTOMATICALLY SHIFTS INTO THE HIGH PRESSURE LIFT STAGE UPON CONTACT WITH THE LOAD.

- Two-speed reduces handle strokes so you work faster and easier.
- More usable oil volume allows for use with larger or longer stroke cylinders.
- True unloading valve provides more efficiency and lower handle force.
- Link design reduces handle effort by 40%.
- Durable aluminum reservoir, manifold, and end cap.
- Ergonomic non-slip handle grip provides more comfort.
- Spring loaded handle lock incorporated into handle.
- Aluminum design reduces weight.

The P59L hand pump is able to quickly advance the cylinder to the load with it's two speed operation.



#### Technical Dimensions

Order	A	В	С	D	E	F	G	Н
No.	(mm)	(mm)	(mm)	(mm)	(mm)	(deg.)	(mm)	(in.)
P19L	141,5	_	104,1	82,6	347,7	40°	7,9	3/8 NPTF
P59L	177,8			82,6	533,4	50°	7,9	3/8 NPTF
P59L-1500	182,1	556,5	138,9	82,6	501,7	47°	7,9	9/16-18 UNF**
P59L-1500G*	182,1	556,5	138,9	82,6	501,7	47°	7,9	9/16-18 UNF**

<sup>\*</sup> Overall length, with the skid-plate is 719 mm.

#### Ordering Information

For Use Spee	Speed	d Order	Volume per Stroke		Max. Pressure		Handle	Rese	ervoir	Oil	Prod.
With		No.	LP (cm³)	HP (cm³)	LP (bar)	HP (bar)	Effort (kg)	Oil Cap.	Usable Oil Cap. (cm³)	Port (cm)	Wt. (kg)
	2	P19L	4,1	0,9	70	700	37	475	443	3/8 NPTF	2,3
Single-	2	P59L	12,0	2,6	59	700	44	1131	1082	3/8 NPTF	4,1
Acting Cylinders	2	P59L-1500	11,1	0,88	20	1500	32,7	1100	729,2	3/4 - 16 UNF	4,7
,	2	P59L-1500G*	11,1	0,88	20	1500	32,7	1100	729,2	3/4 - 16 UNF	6,5

Equipped with a skid plate and a digital gauge.
 LP = Low Pressure, HP = High Pressure

CAUTION: P59L-1500 pumps are not recommended for use with 700 bar tools.

<sup>\*\* 60°</sup> cone fitting.

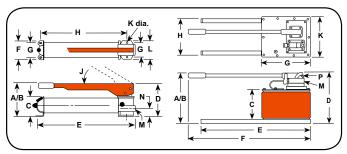
P300, P157, P159D, P460



#### Features

# HEAVY-DUTY STEEL HAND PUMPS HOLD UP TO THE MOST DEMANDING APPLICATIONS.

- Rugged all metal construction for strength and durability that won't burn through in welding environments.
- Heavy-duty, formed metal handle provides rigidity, and reduces operator fatigue with grip.
- Convenient oil fill ports.
- Fill cap seal acts as safety valve to prevent overpressurizing of reservoir.
- Relief valve inboard of check valve prevents loads from drifting down.
- Large valve knob gives added control for slowly metering loads down.





#### Technical Dimensions

Order	Α	В	С	D	Е	F	G	Н	J	K	L	M	N	Р
No.	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(deg.)	(cm)	(cm)	(cm)	(cm)	(cm)
P157 / P159	197	521	123,8	175	578	98,4	76,2	502	39	7,9	95,3	3/8 NPTF	57,2	_
P300	210	522	114,3	175	575	215,9	190,5	526	39	7,9	95,3	3/8 NPTF	57,2	_
P460	283	787	171,5	289	610	743	279,4	229	80	241,3	_	3/8 NPTF	_	1/4 NPTF

#### Ordering Information

Faulles	Cunnel	Speed Order	Volume p	er Stroke	Max. P	ressure	Handle	Rese	ervoir	Oil	Dund
For Use With	Speed	No.	LP	HP	LP	HP	Effort	Oil Cap.	Usable Oil Cap.	Oil Port	Prod. Wt.
			(cm³)	(cm³)	(bar)	(bar)	(kg)	(cm³)	(cm³)	(cm)	(kg)
	2	P157	10,7	2,6	97	700	64	2491	2245	3/8 NPTF	11,8
Single-Acting	2	P159	42,6	2,6	22	700	64	2491	2245	3/8 NPTF	11,8
Cylinders	2	P300	42,6	2,6	22	700	64	5700	5081	3/8 NPTF	25,1
	2	P460	120,5	4,6	22	700	41	9500	7539	3/8 NPTF	24,9
	2	P157D	10,7	2,6	97	700	64	2491	2245	3/8 NPTF	13,1
Double-Acting	2	P159D	42,6	2,6	22	700	64	2491	2245	3/8 NPTF	12,7
Cylinders*	2	P300D	42,6	2,6	22	700	64	5700	5081	3/8 NPTF	25,9
	2	P460D	120,5	4,6	22	700	41	9500	7539	3/8 NPTF	26,3

<sup>\*</sup> Pump includes 4-Way Valve LP = Low Pressure, HP = High Pressure



#### RPS1006, RPS203H





#### Features

# PRECISION-MATCHED CYLINDER AND PUMP SET FOR WIDE RANGE OF APPLICATIONS.

- Four styles of cylinders to choose from.
- Sets feature single or two-speed hydraulic hand pumps.
- Cylinders of various tonnages with long, medium or short stroke.
- Includes necessary fittings, couplers and 1,8 m hose.



#### **OPTIONAL: STORAGE BOX**



Storage box for hydraulic cylinder and pump sets. Rugged industrial strength material, strong as steel, never needs painting, won't rust, dent or chip. Weatherproof lid is self sealing and lockable. Molded-in handles, water-tight, one piece bottom and side construction. Strong enough to stand on. Note: Actual product may differ from photo.

Order No.	Dimensions	Wt. (kg)
350722	940 mm L x 533 mm H x 508 mm W	10,4

#### Ordering Information

Style of Cylinder	Cyl. Cap.	Stroke (cm)	Order No.	Re- tracted Height (cm)	Handle Strokes Required to Fully Extend Cylinders	Cylinder No.	Pump No.	Hose No.	Coupler No.	Pump Speed	Prod. Wt. (kg)
	5	133,4	RPS55	216	75	C55C	P12	9756E	9798	Single	5,4
	10	54,0	RPS102**	121	32	C102C	P55	9756E	9798	Single	11,8
	10	155,6	RPS106**	248	93	C106C	P55	9756E	9798	Single	14,5
	10	257,2	RPS1010**	349	154	C1010C	P55	9756E	9798	Single	16,1
"O" O :	15	104,8	RPS154**	200	81	C154C	P55	9756E	9798	Single	13,1
"C" Series	15	155,6	RPS156**	271	118	C156C	P55	9756E	9798	Single	15,4
	25	158,8	RPS256**	273	219	C256C	P55	9756E	9798	Single	19,3
	25	362,0	RPS2514**	476	285*	C2514C	P159	9756E	9798	Two	28,4
	55	158,8	RPS556**	283	268*	C556C	P159	9756E	9798	Two	37,5
	100	168,3	RPS1006	337	428*	C1006C	P460	9756E	9798	Two	58,3
	30	61,9	RPS302**	117	61*	RSS302	P59	9756E	9798	Two	18,1
"Shorty"	50	60,3	RPS552**	127	89*	RSS502	P59	9756E	9798	Two	22,7
	100	57,2	RPS1002**	140	172*	RSS1002	P59	9756E	9798	Two	36,7
"Center-Hole"	20	76,2	RPS203H**	154	80	RH203	P55	9756E	9798	Single	18,3
Alum.	55	155,6	RPS556A**	273	262*	RA556	P159	9756E	9798	Two	21,3

<sup>\*</sup> Based on 50% of the stroke being made at low-pressure and 50% of the strokes at high pressure.

Add suffix "B" (example: RPS102B, RPS203HB, etc.) to order set with optional storage box shown above.

Model Shown: PA6, PA6M-1, PA6-2

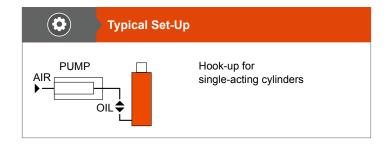




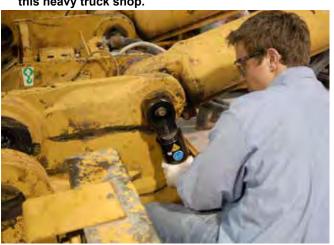
#### Features

#### COMPACT, LIGHTWEIGHT AND PORTABLE. SINGLE-SPEED PUMPS DESIGNED TO DRIVE SINGLE-ACTING CYLINDERS.

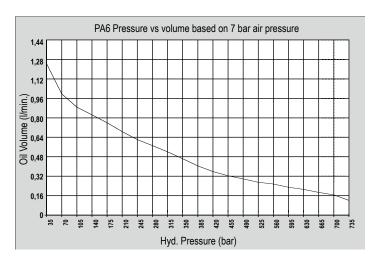
- The power unit of choice for major manufacturers of auto body, frame straighteners and other shop equipment.
- Operate at 3-8 bar shop air pressure at the pump.
- Quiet operation that is suitable for indoor applications,
   85 dBA at 700 bar.
- Serviceable pump motor is not a "throw away" providing economical repair.
- Permanently vented reservoir cap.
- Internal relief valve protects circuit components, air inlet filter protects motor.



PA6 is the perfect choice for driving this nut splitter in this heavy truck shop.



#### Performance Specifications



#### ▶ Two Point Lifting System Example



#### Technical Dimensions

Order No.	A	В	С	D	E	G
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
PA6	197	149	111	241	127	102 x 229
PA6A	197	149	111	241	127	102 x 229
PA6AM	197	149	111	241	127	102 x 229
PA6M	197	149	111	241	127	102 x 229
PA6R	197	149	111	241	127	102 x 229
PA6RM	197	149	111	241	127	102 x 229
PA6M-1	200	152	111	321	187	_
PA6-2	254	197	171	292	241	203 x 254
PA6M-2	260	203	178	292	241	130 x 181

#### Ordering Information

Description	Order	Air Supply	Rese	ervoir	Oil	Prod.
	No.	Req'd	Oil Cap.	Usable Oil Cap.	Port	Wt.
		(bar)	(I)	(l)	(in.)	(kg)
Base model pump with high density polyethylene reservoir.	PA6	3 - 8	1,7	1,6	3/8 NPTF	6,3
PA6 pump with externally adjustable relief valve and polyethylene reservoir	PA6A	3 - 8	1,7	1,6	3/8 NPTF	6,8
PA6 pump with externally adjustable relief valve and metal reservoir.	PA6AM	3 - 8	1,7	1,6	3/8 NPTF	7,7
PA6 pump with metal reservoir.	PA6M	3 - 8	1,7	1,6	3/8 NPTF	8,2
PA6 pump with 3,7 m remote control and polyethylene reservoir	PA6R	3 - 8	1,7	1,6	3/8 NPTF	9,3
PA6 pump with 3,7 m remote control and metal reservoir.	PA6RM	3 - 8	1,7	1,6	3/8 NPTF	9,8
PA6 pump with 3,8 I metal reservoir.	PA6M-1	3 - 8	3,8	3,0	3/8 NPTF	10,7
PA6 pump with 7,6 I high density polyethylene reservoir.	PA6-2	3 - 8	7,6	7,3	3/8 NPTF	11,1
PA6 pump with 9,5 I metal reservoir.	PA6M-2	3 - 8	9,5	9,1	3/8 NPTF	14,5

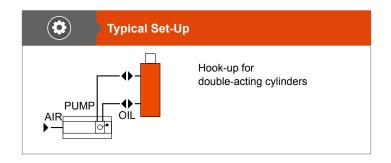
Model Shown: **PA6D** 



#### Features

# COMPACT, LIGHTWEIGHT AND PORTABLE SINGLE-SPEED PUMP FOR DRIVING DOUBLE-ACTING CYLINDERS.

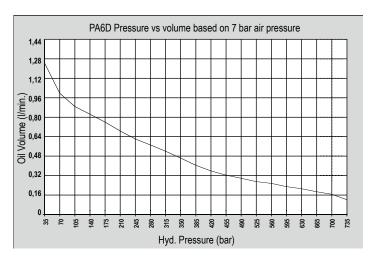
- Operate at 3-8 bar shop air pressure at the pump.
- Internal relief valve protects circuit components while the air inlet filter protects motor.
- Serviceable pump allows for economical repairs.
- Permanently vented reservoir cap.
- 85 dBA at 700 bar for all PA6 pumps.



PA6D pump, 9052 analog and 25 ton cylinder used in a test fixture.



#### Performance Specifications

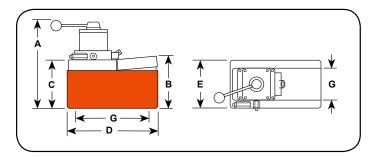




#### PA6D2, PA6DM-1







#### Technical Dimensions

Order No.	A	В	С	D	Е	G
Order No.	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
PA6D	264	149	111	241	127	102 x 229
PA6DM	264	149	111	241	127	102 x 229
PA6DM-1	279	146	111	321	187	_
PA6D2	324	203	178	287	235	130 x 181
PA6DM-2	318	197	171	292	241	203 x 254

#### ▶ Technical Dimensions

Description	Order	Valve	Air	Rese	rvoir	Oil	Prod.
	No.	No.	Supply Req'd	Oil Cap.	Usable Oil Cap.	Port	Wt.
			(bar)	(I)	(I)	(in.)	(kg)
Base model pump with high density polyethylene reservoir.	PA6D	9504, 3-way/4-way	3-8	1,7	1,6	3/8 NPTF	8,3
PA6D pump with metal reservoir.	PA6DM	9504, 3-way/4-way	3-8	1,7	1,6	3/8 NPTF	9,2
PA6D pump with 3,8 I metal reservoir.	PA6DM-1	9504, 3-way/4-way	3-8	3,8	3,0	3/8 NPTF	12,7
PA6D pump with 7,6 I high density polyethylene reservoir.	PA6D2	9504, 3-way/4-way	3-8	7,6	7,3	3/8 NPTF	13,0
PA6D pump with 9,5 I metal reservoir.	PA6DM-2	9504, 3-way/4-way	3-8	9,5	9,1	3/8 NPTF	16,4

#### **PA9 Foot Control, PA9H Hand Control**

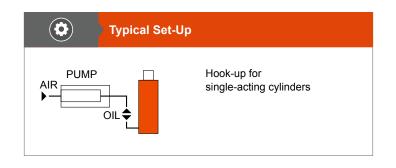




#### Features

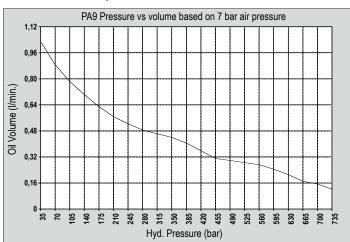
#### **IDEAL FOR POWERING SINGLE-ACTING CYLINDERS** AND PORTABLE HYDRAULIC TOOLS.

- Easier to operate than a hand pump, giving you the speed you need at an affordable price.
- Serviceable pump allows for economical repairs.
- Unique bladder design for all-position operation and storage.
- Operates on 3-8 bar shop air, at 570 l.
- Hard-coat anodized aluminum housing.
- Oil filler with integral safety relief minimizes chance of damage to reservoir bladder if overfilling occurs.



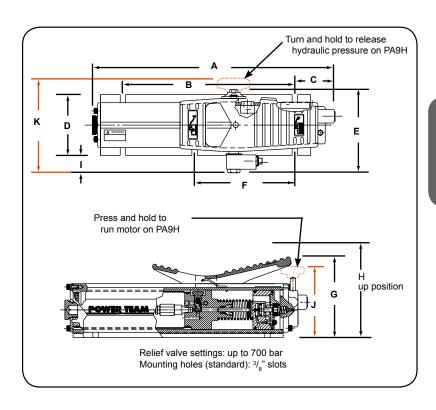
#### PA9H Hand Control Pump used in a straightening press. Performance Specifications





#### ▶ PA9 Foot Control





#### Technical Dimensions

	Α	В	С	D	Е	F	G	Н	I	J	K
Order No.	(mm)										
PA9	432	305	71,4	108	149	178	142	178	28,2	_	_
PA9H	432	305	71,4	108	_	178	_	178	28,2	122	170

#### Ordering Information

For Use With	Order	Air Cumply	Rese	rvoir	Oil	Max.	Prod.
Cyl. Type	No.	Req d Cap. Oil C		Usable Oil Cap.	Port	Pressure Output	Wt.
		(bar)			(in.)	(bar)	(kg)
Single-Acting	PA9	3-8	574	549	3/8 NPTF	700	6,8
Single-Acting	РА9Н	3-8	574	549	3/8 NPTF	700	6,8

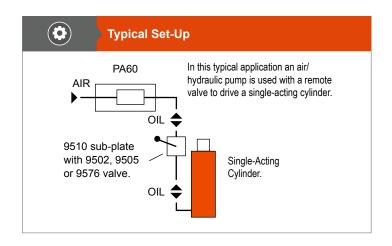
Model Shown: **PA64** 



#### Features

# TWO-SPEED PUMP FOR RAPID OIL DELIVERY AT LOW PRESSURE QUICKLY ADVANCES CYLINDER OR TOOL.

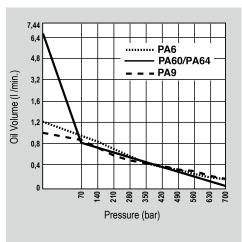
- Equipped with air pressure regulator, air filter and lubricator.
- Serviceable air motor for economical repair.
- Internal relief valve protects circuit components.
- Permanently vented reservoir cap.



#### ▶ The PA60 used in a work-holding environment



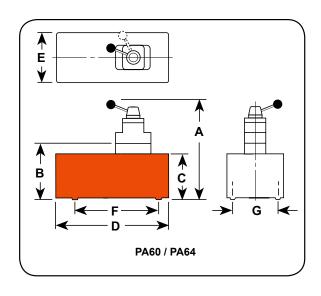
#### Performance Specifications





#### **PA60**





#### Technical Dimensions

Order No.	Α	В	С	D	Е	F	G	_ Max. Oil Del. (I/min. @) *					
								Pressure Output	0	7	70	350	700
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(bar)	(bar)	(bar)	(bar)	(bar)	(bar)
						(······/	()	(10 411 )	()	()	(/		V 1
PA60	_	240	206	362	244	181	130	700	6,24	5,6	0,8	0,19	0,1

<sup>\*</sup> Typical delivery. Actual flow will vary with field conditions.

#### Technical Dimensions

Description	Order	Valve	Valve	Air	Rese	ervoir	Oil	Prod.
	No.	No.	Function	Supply Req'd	Oil Cap.	Usable Oil Cap.	Port	Wt.
				(bar)	(I)	(I)	(in.)	(kg)
For use with remote valves.	PA60	9626 Manifold	_	3 - 8	7,6	6,8	3/8 NPTF	24,5
For use with single or double-acting cylinders	PA64	9507 3/4-Way	Advanced Hold Return	3 - 8	7,6	6,8	3/8 NPTF	24,5

Model Shown: PA50D, PA50M, PA50R2



#### Features

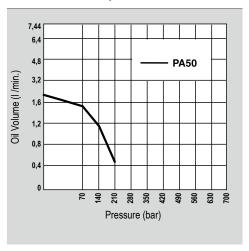
# SINGLE-SPEED, LOW PRESSURE (220 BAR) OUTPUT PUMPS.

- Serviceable air motor for economical repair.
- Air inlet filter protects air motor.
- Filter in outlet port protects against contaminated systems.
- Assorted reservoirs to suit your application's requirements.

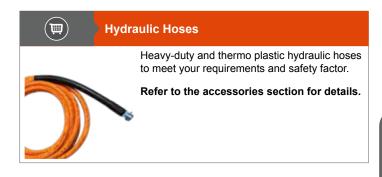
#### ▶ The PA50 used in a work-holding environment

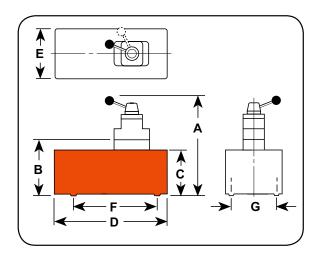


#### Performance Specifications









# circuit.

#### **Analog Gauges**

Improve your system visibility and safety by adding an inline hydraulic gauge to your

9040E (63 mm) 9052E (100 mm)

#### **Technical Dimensions**

Order	۸	В	C	n	Е	F	G	Max.	Max. Oil Del. (I/min. @) *						
No.	^	В		, , ,			J	Pressure Output	0	7	170	220			
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(cm)	(bar)	(bar)	(bar)	(bar)	(bar)			
PA50, PA50R	197	149	111	241	127	_	102 x 229	220	2,05	1,76	1,41	0,45			
PA50R2	260	203	178	292	241	_	130 x 181	220	2,05	1,76	1,41	0,45			
PA50D	264	149	111	241	127	229	102	220	2,05	1,76	1,41	0,45			

<sup>\*</sup> Typical delivery. Actual flow will vary with field conditions.

#### **Ordering Information**

For Use With	Description	Order	Valve	Air	Rese	rvoir	Oil	Prod.
Cylinder Type		No.	No.	Supply Req'd	Oil Cap.	Usable Oil Cap.	Port	Wt.
				(bar)	(I)	(I)	(in.)	(kg)
Single-Acting	Base model pump with high density polyethylene reservoir.	PA50	_	3 - 8	1,7	1,6	3/8 NPTF	6,4
Single-Acting	PA50, except has 3,7 meter remote control.	PA50R	_	3 - 8	1,7	1,6	3/8 NPTF	8,4
Single-Acting	PA50R, except has 7,6 liter reservoir.	PA50R2	_	3 - 8	7,6	7,3	3/8 NPTF	12,9
Single and Double-Acting	PA50 pump with valve and polyethylene reservoir.	PA50D	9504	3 - 8	1,7	1,6	3/8 NPTF	8,4

Notes: Air inlet port 1/4" NPTF. Requires 570 I/min at 7 bar shop air pressure at the pump to achieve 220 bar.

Model Shown: PA172, PA174



#### Features

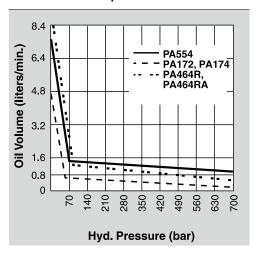
# ROTARY-STYLE AIR MOTOR. USE WHERE AIR IS THE PREFERRED SOURCE OF ENERGY.

- Two-speed operation for high speed cylinder advance.
- Durable 7,6 liter thermoplastic reservoir.
   (Metal reservoir conversion kits are available.)
- Air motor capable of starting under full load.

#### ▶ The PA17 used with a flange spreader



#### Performance Specifications







#### **Hydraulic Hoses**

Heavy-duty and thermo plastic hydraulic hoses to meet your requirements and safety factor.

Refer to accessories section for details

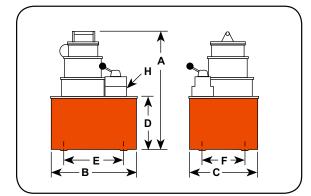




#### **Hydraulic Fluids**



For dependable performance of all your hydraulic pumps and cylinders. Power Team specialty blended oils contains foam suppressant additives and has a high viscosity index. Refer to the Accessories section for complete details





#### Learn More - About Hydraulic Safety Insight



Looking for great safety suggestions? Visit our Resource Section to get a better understanding of hydraulic and mechanical safety insights on what to look for when working around hydraulics

#### Technical Dimensions

Order No.			_		_	_	.,	Max.		0 liO	Del. (I/min.	@) *	
NO.	A	В	, c	D D	E	r	Н	Pressure Output	0	7	70	350	700
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(in.)	(bar)	(bar)	(bar)	(bar)	(bar)	(bar)
PA172	359	289	235	178	181	130	3/8 NPTF	700	4,6	3,8	0,4	0,4	0,3
PA174	359	289	235	178	181	130	3/8 NPTF	700	4,6	3,8	0,4	0,4	0,3

<sup>\*</sup> Typical delivery. Actual flow will vary with field conditions.

#### Ordering Information

For Use With	Description	Order	Valve	Valve	Air	Rese	Prod.	
Cylinder Type	Description	No.	No.	Function	Supply Req'd	Oil Cap.	Usable Oil Cap.	Wt.
					(bar)	(L)	(L)	(kg)
Single-Acting	Base model pump with 7,6 liter thermoplastic reservoir.	PA172	9517, 2-way	Advance Return*	3-8	7,6	4,7	18,1
Single and Double-Acting	PA172, except has 9500 valve for use with single or double-acting cylinders	PA174	9500, 4-way	Advance Hold Return*	3-8	7,6	4,7	18,6

<sup>\*</sup> Holds pressure in advance position when valve motor is shut-off or in return position with motor running. Pump will build pressure when motor is shut-off and oil returns to reservoir.

Notes: Requires 1133 I/min at 7 bar shop air pressure at the pump. 85/90 dBA at 700 bar.

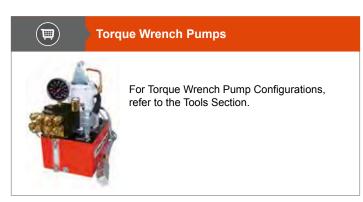
Model Shown: PA462, PA464R, PA554



#### Features

# ROTARY-STYLE AIR MOTOR. USE WHERE AIR IS THE PREFERRED SOURCE OF ENERGY.

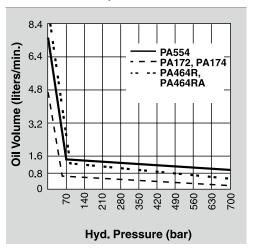
- 2,2 kW motor starting under full load.
- Two-speed operation for rapid cylinder advance.
- Models available with full remote control over advance and return, (except PA554).
- Tandem center valve holds the load when pump is shut-off.



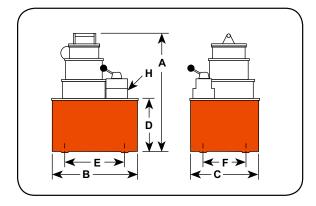
PA554 pump and RH2008 Center Hole cylinder used to tension cables.

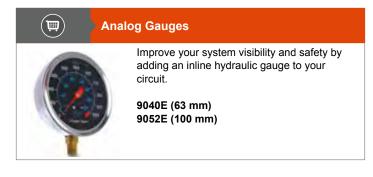


#### ▶ Performance Specifications









#### Technical Dimensions

Order			C D E F			F	.,	Max.	Oil Del. (I/min. @) *						
No.	А	В	U	D D	-		Н	Pressure Output	0	7	70	350	700		
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(in.)	(bar)	(bar)	(bar)	(bar)	(bar)	(bar)		
PA462	381	292	241	178	254	203	3/8 NPTF	700	7,4	7,2	0,8	0,8	0,7		
PA464	381	292	241	178	254	203	3/8 NPTF	700	7,4	7,2	0,8	0,8	0,7		
PA464R	381	292	241	178	254	203	3/8 NPTF	700	7,4	7,2	0,8	0,8	0,7		
PA464RA	381	292	241	178	254	203	3/8 NPTF	700	7,4	7,2	0,8	0,8	0,7		
PA554	483	292	241	178	254	203	3/8 NPTF	700	7,4	7,2	1,3	1,1	0,7		

<sup>\*</sup> Typical delivery. Actual flow will vary with field conditions.

Note: Reservoir has four 1/2" - 20 mounting holes.

#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Number	Valve Function	Air			Prod. Wt.
Cyllilder Type				Fullction	Supply Req'd	Oil Cap.	Usable Oil Cap.	W.
					(bar)	(L)	(L)	(kg)
Single-Acting	Base model pump with 9,6 liter steel reservoir.	PA462	9584, 2-way	Advance/ Hold/Return	3 - 8	9,5	9,4	27,2
Single and Double-Acting	PA462, except has 9500 valve capable of running 2 single-acting cylinders or one double-acting cylinder.	PA464	9500, 4-way	Advance/ Hold/Return*	3 - 8	9,5	9,4	27,6
Single and Double-Acting	PA462 with air actuated valve for full remote control over advance and return. Includes 3,7 meter remote control.	PA464R†	9594, 4-way	Advance/ Hold/Return	3 - 8	9,5	9,4	35,3
Single and Double-Acting	PA464R except, has automatic dump feature. 7,6 meter remote control.	PA464RA**†	9594, 4-way	Advance/ Hold/Return*	3 - 8	9,5	9,4	35,8
Single and Double-Acting	High performance pump with 9,5 liter steel reservoir.	PA554	9500, 4-way	Advance/ Hold/Return*	3 - 8	9,5	8,4	32,0

<sup>\*</sup> Holds when motor is shut-off and valve is in "advance" position.

Notes: Requires 1420 l/m at 5,5 bar shop air pressure at the pump. 85/90 dBA at 700 bar.

<sup>\*\*</sup> Not to be used for lifting.

<sup>†</sup> The PA464RA has an "automatic dump" feature. Pressure is not held when operator releases "advance" or "return" button. PA464R will "hold" only in the "advance" position with the motor shut-off.



Model Shown: PUA70U, PMA190U

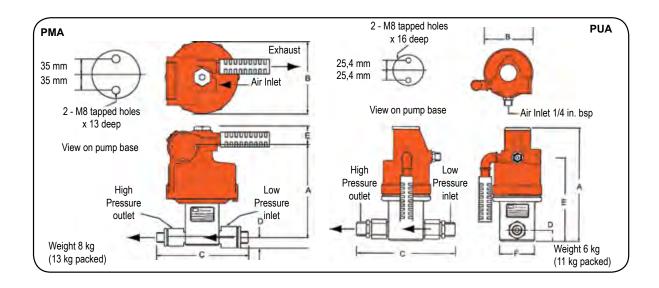




#### Features

# PROVIDES INFINITELY VARIABLE CAPACITY AND DISCHARGE PRESSURE

- Suitable for continuous and start/stop applications.
- Pumps oil, water, and other fluids.
- Stainless steel pump and check valves standard.
- Maintains pressure with minimal power consumption (Non-load holding).
- Usable in hazardous areas (per ATEX II, CAT. 2 GDcT5).
- Quiet operation
- Simple to install and maintain with a compact, rugged design.
- Only 1 bar air pressure required to start pump.
- Requires flooded inlet. vertical mount.
- Can operate on gases other than air.



#### Technical Dimensions

Order No.	RAM/ Dia.	A	В	С	D	E	F
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
PUA26U	31,75	233	102	168	22,2	170	73
PUA70U	19,00	222	102	168	22,2	158	73
PUA157U	12,70	222	102	168	22,2	158	73
PUA275U	9,53	222	102	168	22,2	158	73
PUA430U	7,94	222	102	168	22,2	158	73
PUA655U	6,35	222	102	168	22,2	158	73
PUA982U	5,13	222	102	168	22,2	158	73
PMA27U	76,20	220	178	230	38,0	48	-
PMA60U	50,80	210	178	230	38,0	48	-
PMA90U	41,30	210	178	230	38,0	48	-

Order No.	RAM/ Dia.	Α	В	С	D	Е	F
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
PMA130U	35,00	203	178	195	22	48	-
PMA190U	28,50	203	178	195	22	48	-
PMA240U	25,40	203	178	195	22	48	-
PMA370U	20,60	203	178	178	22	48	-
PMA520U	17,50	203	178	178	22	48	-
PMA770U	14,30	203	178	178	22	48	-
PMA980U	12,70	203	178	178	22	48	-
PMA1740U	9,50	203	178	256	22	48	-
PMA2410U	8,00	203	178	256	22	48	-

#### Ordering Information

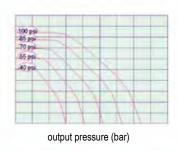
NPT Fittings	Ratio	Outlet Pres.	Outlet Per Cycle	Max. Flow at 0 Press.	Inlet	Outlet
	1:00	(bar)	(L)	(l/min.)	(NPT)	(NPT)
PUA26U	4,3	26	0,0280	14,0	1/2" NPT	1/2" NPT
PUA70U	11,9	70	0,0100	5,0	1/2" NPT	1/2" NPT
PUA157U	26,7	157	0,0040	2,4	1/2" NPT	1/2" NPT
PUA275U	47,5	275	0,0025	1,4	1/2" NPT	1/2" NPT
PUA430U	68,4	430	0,0017	0,9	1/2" NPT	1/2" NPT
PUA655U	107,0	655	0,0011	0,6	1/2" NPT	1/2" NPT
PUA982U	163,8	982	0,0007	0,4	1/2" NPT	1/2" NPT
PMA27U	4,0	27	0,1600	37,0	1" NPT	3/4" NPT
PMA60U	9,0	60	0,0700	23,0	1" NPT	3/4" NPT
PMA90U	13,6	90	0,0500	15,0	1" NPT	3/4" NPT

NPT Fittings	Ratio	Outlet Pres.	Outlet Per Cycle	Max. Flow at 0 Press.	Inlet	Outlet
	1:00	(bar)	(L)	(I/min.)	(NPT)	(NPT)
PMA130U	19,0	130	0,0340	11,0	3/4" NPT	1/2" NPT
PMA190U	28,4	190	0,0230	7,3	3/4" NPT	1/2" NPT
PMA240U	36,0	240	0,0180	5,8	3/4" NPT	1/2" NPT
PMA370U	54,5	370	0,0120	3,8	1/2" NPT	1/2" NPT
PMA520U	76,5	520	0,0080	2,8	1/2" NPT	1/2" NPT
PMA770U	113,0	770	0,0060	1,8	1/2" NPT	1/2" NPT
PMA980U	145,0	980	0,0040	1,5	1/2" NPT	1/2" NPT
PMA1740U	256,0	1740	0,0025	0,8	1/2" NPT	HP
PMA2410U	368,0	2410	0,0017	0,6	1/2" NPT	HP

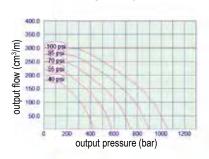
output flow (cm<sup>3</sup>/m)

#### PUA:

PUA - 4.3:1



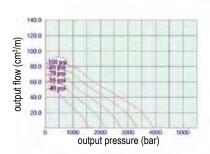
PUA - 11.9:1



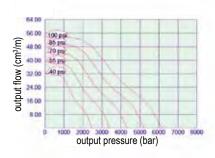
PUA - 26.7:1



PUA - 47.5:1



PUA - 68.4:1



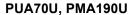
PUA - 107:1



PUA - 163.8:1



Model Shown:



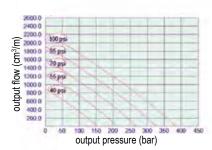




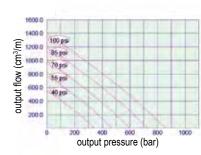


#### PMA:

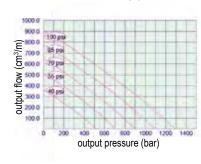
PMA - 4:1



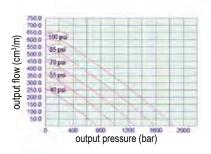
PMA - 9:1



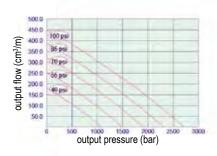
PMA - 13.6:1



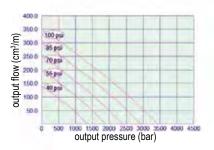
PMA - 19:1



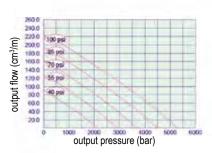
PMA - 28.4:1



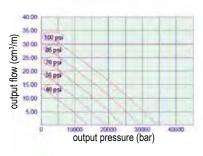
PMA - 36:1



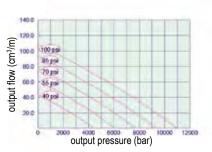
PMA - 54.5:1



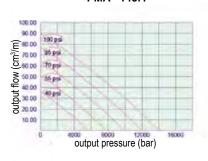
PMA - 76.5:1



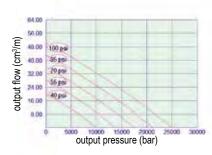
PMA - 113:1



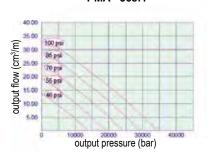
PMA - 145:1



PMA - 256:1



PMA - 368:1





Model Shown: PB102P-1



#### Features

# COMPACT, PORTABLE, CORDLESS HYDRAULIC PUMP FOR MRO APPLICATIONS.

- Compact, Li-ion 18VDC, 9.0 Ah battery-powered pump provides extended run-time.
- Two-stage, high-pressure hydraulic pump offers quick tool advancement in the first stage.
- Extremely compact, lightweight with an ergonomic handle grip and transport strap to ease portability.
- Self-contained, rubber bladder reservoir allows pump usage in most positions with an impressive capacity of 1,1 I usable.
- Quiet, smooth-running, serviceable brushed 18VDC motor.
- High-impact, fiberglass reinforced shroud protects your investment in the most demanding and harsh applications.
- Interchangeable valve configuration accommodate a vast array of applications.
- CSA rated for intermittent duty, CE compliant.

#### Ordering Information

Order Number	Description	Refer to Note	Tool Type	Valve Type	Valve Function	Remote Control
PB102-0	18VDC, 1/4 HP Power Pump, S/A, 2-Way with Auto Dump	(1)	SA	2-Way/ Auto. Dump (9561)	Advance / Return (Auto)	Optional
PB102P-0	18VDC Power Pump, S/A, 2-Way with Auto Dump	(1)	SA	2-Way/ Auto. Dump (9561)	Advance / Return (Auto)	Hand Pendant with 3m cord included
PB102R-0	18VDC Power Pump, S/A, 2-Way with Auto Dump and Pressure Regulator	(1), (3)	SA	2-Way/ Auto. Dump / Pressure Regulator (9561, 9560)	Advance / Return (Auto) / Pressure Adjustment 70 -690 bar	Optional
PB102A-0	18VDC Power Pump, S/A, Auto Dump	(2)	SA	Auto. Dump (9562)	Advance / Return	Optional
PB104-0	18VDC Power Pump, D/A, 4-Way	(4)	DA	4-Way (9563)	Advance / Hold / Return	Optional
PB102-2	18VDC Power Pump, S/A, 2-Way with Auto Dump	(1)	SA	2-Way/ Auto. Dump (9561)	Advance / Return (Auto)	Optional
PB102P-2	18VDC Power Pump, S/A, 2-Way with Auto Dump	(1)	SA	2-Way/ Auto. Dump (9561)	Advance / Return (Auto)	Hand Pendant with 3m cord included
PB102R-2	18VDC Power Pump, S/A, 2-Way with Auto Dump and Pressure Regulator	(1), (3)	SA	2-Way/ Auto. Dump / Pressure Regulator (9561, 9560)	Advance / Return (Auto) / Pressure Adjustment 70 -690 bar	Optional
PB102A-2	18VDC Power Pump, S/A, Auto Dump	(2)	SA	Auto. Dump (9562)	Advance / Return	Optional
PB104-2	18VDC Power Pump, D/A, 4-Way	(4)	DA	4-Way (9563)	Advance / Hold / Return	Optional
PB102-3	18VDC, HP Power Pump, S/A, 2-Way with Auto Dump	(1)	SA	2-Way/ Auto. Dump (9561)	Advance / Return (Auto)	Optional
PB102P-3	18VDC Power Pump, S/A, 2-Way with Auto Dump	(1)	SA	2-Way/ Auto. Dump (9561)	Advance / Return (Auto)	Hand Pendant with 3m cord included
PB102R-3	18VDC Power Pump, S/A, 2-Way with Auto Dump and Pressure Regulator	(1), (3)	SA	2-Way/ Auto. Dump / Pressure Regulator (9561, 9560)	Advance / Return (Auto) / Pressure Adjustment 70 -690 bar	Optional
PB102A-3	18VDC Power Pump, S/A, Auto Dump	(2)	SA	Auto. Dump (9562)	Advance / Return	Optional
PB104-3	18VDC Power Pump, D/A, 4-Way	(4)	DA	4-Way (9563)	Advance / Hold / Return	Optional

<sup>(1) 2-</sup>Way Auto Dump Function: Flapper handle in "hold" position will allow the tool to advance and maintain pressure when the motor is shut off, flapper handle must be switched back to retract and dump pressure. Flapper handle is set to "return" position, power on will advance tool and power off will retract tool and dump pressure.

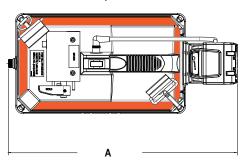
<sup>(2)</sup> Auto Dump Function: Power on - tool advances, and power off - tool returns, releasing pressure to tank.

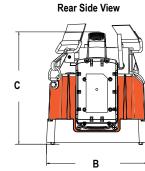
SA = Single-Acting DA = Double-Acting



#### Technical Dimensions

#### **Top View**







#### **Optional Remotes**

These remotes are equipped with connectors to enable the operator to "plug and play" the connection quickly. The wiring is configured to allow the operator to use the power switch on the pump or operate remotely once connected.



Hand Pendant Order # 3000989

Foot Pendant Order # 3000975

#### Hardware Included



Turnkey, 690 bar hydraulic power pump powered by an 18VDC Li-ion battery, ships with hydraulic oil.



Transport shoulder strap with clips installed on shroud for quick fastening or removal.



One 18VDC Li-ion 9.0 Ah Battery, additional batteries can be purchased separately. Order #3000973



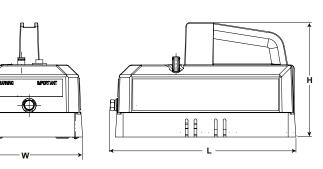
18VDC battery charger available in 230V for certain models, refer to the ordering information below.
Order #2009647 EU, #2010141 UK

Flow @ Stages	Usable Oil Capacity	Battery Included	Charger (w/plug style)		Dimension		Weight	Order Number
(cm³)	(cm³)			(mm)			(kg)	
				Α	В	С		
						215	10,9	PB102-0
1st Stage: 3.300 cm³/min. @ 14 bar		(1) One 18VDC				215	11,8	PB102P-0
· ·	1150	`Ĺi-ion 9.0 Ah	No charger is included	438	192	242	11,3	PB102R-0
2nd Stage: 98 cm³/min. @ 690 bar		included				192	10,9	PB102A-0
						259	11,3	PB104-0
			(1) One 230V M18			215	10,9	PB102-2
1st Stage: 3.300 cm³/min. @ 14 bar		(1) One 18VDC	Charger Included, Europe only			215	11,8	9 PB102-0 8 PB102P-0 3 PB102R-0 9 PB102A-0 9 PB102-2 8 PB102P-2 3 PB102R-2 9 PB102A-2 9 PB102A-2 9 PB102-3 PB102P-3 9 PB102R-3 9 PB102A-3
_	1150	Li-ion 9.0 Ah	Europe only	438	192	242	11,3	
2nd Stage: 98 cm³/min. @ 690 bar		included				192	10,9	PB102A-2
						259	11,3	PB104-2
			(1) One 230V M18			215	10,9	PB102-3
1st Stage:		(4) 0 - 40) (50	Charger Included, United Kingdom only			215	11,8	PB102P-3
3.300 cm³/min. @ 14 bar 2nd Stage: 98 cm³/min. @ 690 bar	1150	(1) One 18VDC Li-ion 9.0 Ah	Officea Kingdoffi Offiy	438	192	242	11,3	PB102R-3
		included				192	10,9	PB102A-3
-						259	11,3	PB104-3

Model Shown: PE104. PR104





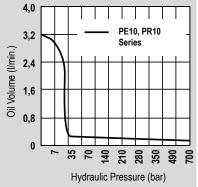


#### Features

HIGH-PERFORMANCE IN A COMPACT PACKAGE. ELECTRIC AND BATTERY POWERED MODELS FOR POWERING TOOLS AND CYLINDERS UP TO 25 TON.

- Portable power source for hydraulic cylinders and tools.
- Permanent magnet motor starts easily under load, even with reduced voltage conditions.
- Battery-operated models have 2,4 m power cord with alligator clips to connect to any 12VDC battery.
- Optional rechargeable battery pack with shoulder strap for maximum portability.
- Pump typically delivers 15 minutes of continuous operation at 700 bar on a single battery.
- Pump can be operated in any position.
- 24VDC hand and foot switches available for all AC powered models.
- High-impact housing with flame—retardant construction.
- Base mounting holes for fixed installations.
- CSA rated for intermittent duty.

#### Performance Specifications



#### Technical Dimensions

Order No.	Max. Pressure	dBA at Idle and 700	Oil Del. (	I/min. @)	(	Prod. Wt.			
	Output		0	700	Length	Width Height		with Oil	
	(bar)	(bar)	(bar)	(bar)	(mm)	(mm)	(mm)	(kg)	
PE10 Series	700	68-74*	1,9	0,16	330	197	203	9,1	
PR10 Series	700	00-74	1,9	0,10	330	197	203	9,1	

<sup>\*</sup> Measured at 0,9 m distance, all sides.

### PE10 SERIES

#### Accessories



BP212VQ – Optional 12VDC battery pack. Includes sealed lead acid battery, 115V charger, 1,2 m cord, carrying case and shoulder strap. Wt., 8 kg

RB12V - Battery only.

BP12INT – Battery with cord and carrying case. Wt., 5 kg

RC12V – Replacement 1,2 m. battery cord only. Wt., 0,2 kg

**NOTE:** PR10 rechargeable model is equipped with 2,4 m cord with alligator clips. Order optional battery pack (No. BP212VQ) or use with any 12VDC battery.

**NOTE:** Amp draw at 700 bar – 6 amp at 115V, 3 amp at 230V, and 35 amp at 12VDC.



**BC212EUR** – Battery charger for Europe. Wt., 3 kg

ware included. Wt., 1,4 kg.  $\bf 25017$  – Remote hand control with 3,1 m cord. Wt., 0.4 kg.



9560 – Pressure regulator. Adjustable from 7 to 700 bar. All mounting hardware included. Wt. 1.4 kg.



**251660** – Foot switch with 3,1 m cord. Single pole, double throw, 15 amp @ 125-250V. Wt., 0,5 kg.

The Quarter Horse pump has a maximum operating pressure of 700 bar, which handles a wide variety of hand-held hydraulic tools.



#### Ordering Information

Order No.	For Use With Cylinder Type	Description	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable Oil Cap. (I)
PE102-E220	Single-Acting	Base model pump with 0,19 kW motor. Bladder type reservoir, 110 volt power required.	2-Way/ Auto. Dump	9561	Advance Return (Auto.)*	Rocker Type off, Momentary on	0,19 kW, 220/230V 50/60 Hz, Single Phase	1
PE102A-E220	Single-Acting	PE102-E220, except has automatic dump valve.	Auto. Dump	9562	Advance Return**	Rocker Type off, Momentary on	0,19 kW, 220/230V 50/60 Hz, Single Phase	1
PE102-220	Single-Acting	PE102, except requires 220 volt.	2-Way/ Auto. Dump	9561	Advance Return (Auto.)*	Rocker Type off, Momentary on	0,19 kW, 220/230V 50/60 Hz, Single Phase	1
PE102A-220	Single-Acting	PE102A, except requires 220 volt.	Auto. Dump	9562	Advance Return**	Rocker Type off, Momentary on	0,19 kW, 220/230V 50/60 Hz, Single Phase	1
PR102	Single-Acting	PE102, except requires 12 volt DC.	2-Way/ Auto. Dump	9561	Advance Return (Auto.)*	Rocker Type off, Momentary on	0,19 kW, 12V†	1
PR102A	Single-Acting	PE102A, except requires 12 volt DC.	Auto. Dump	9562	Advance Return**	Rocker Type off, Momentary on	0,19 kW, 12V†	1
PE104	Single-Acting, Double-Acting	"Base model pump has 4-way valve for operating double-acting systems. 110 volt power required."	4-Way	9563	Advance Hold Return	Rocker Type off, Momentary on	0,19 kW, 220/230V 50/60 Hz, Single Phase	1
PE104-E220	Single-Acting, Double-Acting	PE104, except requires 220 volt.	4-Way	9563	Advance Hold Return	Rocker Type off, Momentary on	0,19 kW, 220/230V 50/60 Hz, Single Phase	1
PR104	Single-Acting, Double-Acting	PE104, except requires 12 volt DC.	4-Way	9563	Advance Hold Return	Rocker Type off, Momentary on	0,19 kW, 12V†	1

<sup>\*</sup> Advance position holds pressure with motor shut-off. Return position advances cylinder with motor running and returns cylinder with motor shut-off.

<sup>\*\*</sup> Cylinder advances with motor running and automatically returns with motor shut-off.

<sup>†</sup> Comes with an 8 ft. alligator clip cord for 12VDC use.

Model Shown: PE172-E220

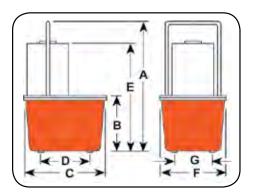


#### Features

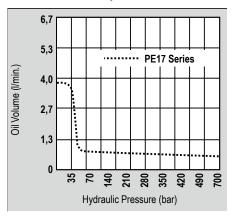
# FOR MAINTENANCE AND CONSTRUCTION APPLICATIONS.

- For use with single or double-acting cylinders at operating pressure up to 700 bar.
- Equipped with 0,37 kW, 2850 rpm, single-phase, thermal protected induction motor; 3 m remote control cord (PE172S has 7,6 m cord)
- Low amperage draw; small generators and low amperage circuits can be use as power source.
- Extremely quiet noise level (67-81 dBA).
- Starts under full load for intermittent duty.





#### Performance Specifications



#### Technical Dimensions

Order	Α	В	С	D	Е	F	G	Max.	rpm	dBA at	Amp Draw		Oil Del. (	l/min. @)		Prod.
No.								Pressure Output	·	Idle and 700	220 V - at 700	0	7	350	700	Wt. with Oil
	(mm)	(bar)		(bar)	(bar)	(bar)	(bar)	(bar)	(bar)	(kg)						
PE17 Series	470	178	289	181	378	235	130	700	2800	67/81*	5	3,9	2,5	0,3	0,2	20,4
PE17M Series	460	168	292	_	368	241	_	700	2800	67/81*	5	3,9	2,5	0,3	0,2	24,0

<sup>\*</sup> Measured at 0,9 m distance, all sides



#### **Ordering Information**

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable Oil Cap. (I)
Single-Acting	Base model pump with 0,37 kW pump with 7,6 liter thermoplastic reservoir. Non CE	PE172-50-220	2-Way	9517	Advance Return (Auto†)	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50/60 Hz, Single Phase	4,72
Single-Acting	PE172-50-220, Non CE except has 9,5 liter steel reservoir.	PE172M-50-220	2-Way	9517	Advance Return (Auto†)	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50/60 Hz, Single Phase	6
Single-Acting	PE172-50-220, Non CE except has solenoid operated valve.	PE172S-50-220	3-Way	9570	Advance Hold Return	Remote Motor & Valve (7,6 m)	0,37 kW, 220V 50/60 Hz, Single Phase	4,72
Single-Acting	PE172S-50-220, Non CE except has steel reservoir.	PE172SM-50-220	3-Way	9570	Advance Hold Return	Remote Motor & Valve (7,6 m)	0,37 kW, 220V 50/60 Hz, Single Phase	6
Single-Acting	Best suited for crimping, punching, pressing. Not for lifting. Thermoplastic reservoir.	PE172A-50-220∞	Auto./Dump Manifold	45554	Advance Return	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50/60 Hz, Single Phase	4,72
Single-Acting	PE172A-50-220, Non CE except has steel reservoir.	PE172AM-50-220∞	Auto./Dump Manifold	45554	Advance Return	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50/60 Hz, Single Phase	6
Single-Acting	0,37 kW pump with 7,6 liter thermoplastic reservoir. Meets CE requirements	PE172-E220	2-Way	9517	Advance Return (Auto†)	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50/60 Hz, Single Phase	4,72
Single-Acting	PE172-E220, except has 9,5 liter steel reservoir.  Meets CE requirements	PE172M-E220	2-Way	9517	Advance Return (Auto†)	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50/60 Hz, Single Phase	6
Single-Acting	PE172-E220, except has solenoid operated valve.  Meets CE requirements	PE172S-E220	3-Way	9570	Advance Hold Return	Remote Motor & Valve (3,1 m)	0,37 kW, 220V 50 Hz, Single Phase	4,72
Single-Acting	PE172-E220, except has steel reservoir. Meets CE requirements	PE172SM-E220	3-Way	9570	Advance Hold Return	Remote Motor & Valve (3,1 m)	0,37 kW, 220V 50 Hz, Single Phase	6
Single-Acting	Best suited for crimping, punching, pressing. Not for lifting. Thermoplastic reservoir. Meets CE requirements	PE172A-E220∞	Auto./Dump Manifold	4554	Advance Return	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50 Hz, Single Phase	4,72
Single-Acting	PE172A-E220, except has steel reservoir. Meets CE requirements	PE172AM-E220∞	Auto./Dump Manifold	4554	Advance Return	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50 Hz, Single Phase	6
Single/ Double-Acting	PE172-50-220, Non CE except has 9500 double-acting valve.	PE174-50-220	4-Way	9500	Advance Hold Return*	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50 Hz, Single Phase	4,72
Single/ Double-Acting	PE174-50-220, Non CE except has steel reservoir.	PE174M-50-220	4-Way	9500	Advance Hold Return*	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50 Hz, Single Phase	6
Single/ Double-Acting	PE172-E220, except has 9500 double-acting valve. Meets CE requirements	PE174-E220	4-Way	9500	Advance Hold Return*	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50 Hz, Single Phase	4,72
Single/ Double-Acting	PE174-E220, except has steel. Meets CE requirements	PE174M-E220	4-Way	9500	Advance Hold Return*	Remote Motor Control (3,1 m) on/off	0,37 kW, 220V 50 Hz, Single Phase	6

<sup>\*</sup> Advance position holds pressure with motor shut-off.

NOTE: Usable oil is calculated with the oil fill at the recommended level of 38 mm below reservoir cover plate.

NOTE: Contact Factory for special 12VDC version for service vehicles
Also available in E110 (meets CE requirement)

<sup>†</sup> Advance position holds pressure with motor shut-off. Return position advances cylinder with motor running and returns cylinder with motor shut-off.

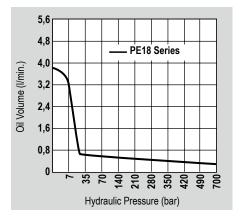
<sup>∞</sup> Not to be used for lifting.

<sup>‡</sup> Some Power Team pumps are available in special configurations not listed in this catalog. For your special requirements please consult your local distributor or the Power Team factory.

#### PE182, PE183-2, PE183C



#### Ordering Information



#### Features

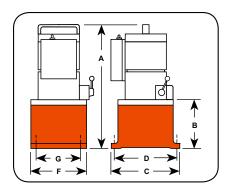
# IDEAL FOR USE WITH SMALL HYDRAULIC POWER TOOLS.

- Vanguard Jr.® pumps provide two-speed highperformance in a light-weight, compact package.
- Gauge port provided on pump. Metal reservoir on all models.
- Equipped with at 0,37 kW, 220V, 60/50 Hz single-phase motor that starts under load, even at reduced voltage.
- Low amperage draw permits use with smaller generators and low amperage circuits.
- All pumps have a 3,1 m remote control (PE183C has 7,6 m remote control).
- Noise level of 85-90 dBA.
- CSA rated for intermittent duty.
- Non CE.

## 

### For operating hydraulic crimping, cutting or other tools:

- PE183C For crimping or pressing applications. Has special electrical circuitry to pulse/advance, hold at full pressure, build to a predetermined pressure, release and reset circuit. Features separate emergency return switch.
- PE184C Allows operator to alternately operate a spring-return cutting and/or crimping tool without disconnecting either tool. Select port connection with manual 4-way valve, start pump with remote control hand switch and extend connected tool. When hand switch is switched to off, pump stops and automatic valve opens, allowing tool to return. In center (neutral) position, manual control valve holds tool in position at time valve is shifted.



#### **Technical Dimensions**

Order No.	Α	В	С	D	F	G	Max. Pressure			Amp Draw 220V at	(	Prod. Wt.			
							Output		700	700	0	7	350	700	with Oil
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(bar)		(bar)	(A)	(bar)	(bar)	(bar)	(bar)	(kg)
PE182	406	121	203	181	152	130	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	13,6
PE183	406	121	203	181	152	130	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	13,6
PE183A	406	121	203	181	152	130	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	13,6
PE184	406	121	203	181	152	130	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	13,6
PE183-2*	470	184	292	254	241	203	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	19,0
PE184-2*	470	184	292	254	241	203	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	19,0
PE183C ††	406	121	203	181	152	130	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	13,6
PE184C ††	406	121	203	181	152	130	700	12000	85/90**	10,2	3,7	3,0	0,4	0,3	13,6

<sup>\* 9,5</sup> I reservoir.

#### **Performance Specifications**

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve Function	Control Switch	Motor	Reservoir Usable Oil Cap. (L)
Single-Acting	Base model pump has 0,37 kW pump with 2-Way valve and 1,9 liter reservoir.	PE182	2-Way	Advance Return†	Remote Motor Control (3,1 m) on/off	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	1,7
Single-Acting	PE182, except has 3-way valve.	PE183	3-Way	Advance Hold Return	Remote Motor Control (3,1 m) on/off	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	1,7
Single-Acting	PE183, except has 2 gallon reservoir.	PE183-2	3-Way	Advance Hold Return	Remote Control (3,1 m)	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	8,4 ††
Single-Acting	PE183, except has "dump valve".	PE183A∞	Auto./Dump Pump	Advance Return	Remote (3,1 m)	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	1,7
Single-Acting	Special crimping pump.	PE183C∞	Special, for crimping only	Advance Hold Return†	Remote Motor Control (7,6 m) on/off	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	1,7
Single-Acting/ Double-Acting	Base model pump has 0,37 kW pump for double-acting systems with 1,9 liter reservoir.	PE184	4-Way	Advance Hold Return	Remote Motor Control (3,1 m) on/off	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	1,7
Single-Acting/ Double-Acting	PE184, except with 9,5 liter reservoir.	PE184-2	4-Way	Advance Hold Return†	Remote Motor Control (3,1 m) on/off	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	8,4 ††
Single-Acting/ Double-Acting	Special crimping pump.	PE184C*	4-Way	Advance Return	Remote Control (3,1 m) on/off	0,37 kW, 110/115V** 50/60 Hz, A.C., Single Phase	1,7

<sup>\*\*</sup> Measured at 3 ft. distance, all sides.

<sup>†</sup> Typical delivery. Actual flow will vary with field conditions.

<sup>††</sup> Special application pumps for cutting, crimping or pressing.

<sup>\*</sup> Also for use with special single-acting cylinder applications.

\*\* Available with 220V, 60/50 Hz motor (to order, place suffix "50-220" behind pump order number). Specify voltage when ordering.

† Holds when motor is shut-off and valve is in "advance" position.

†† Pumps supplied with 7,6 I oil (usable oil is 5,7 I), will hold 9,5 I gallon when filled to within 38 mm below reservoir cover plate.

Not to be used for lifting.

sdwnc

Model Shown:

#### PE213, PE214, PE214S



PE21 series pump and RD5513 cylinder used in a

extracts for herbal medicines.

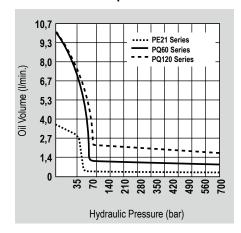
special press that produces pharmaceutical-grade



#### Features

# IDEAL FOR USE WITH SMALL MEDIUM HYDRAULIC POWER TOOLS.

- Totally enclosed, fan cooled induction motor: 0,75 kW, 1725 rpm, 60 Hz, single-phase. Thermal overload protection.
- Remote control, with 3,1 m cord is standard on pumps with solenoid valves. Manual valve pumps have "Stop", "Start" and "Run/Off/Pulse" switches.
- Pump controls are moisture and dust resistant.
- Motor drip cover with carrying handles and lifting lug.
- Low noise level of 70 dBA@700 bar.
- In the event of electrical interruption, pump shuts off and will not start up until operator presses the pump start button.
- Units with remote have a 24V control circuit that provides additional user/operator safety.
- CSA rated for intermittent duty.
- Non CE.







#### Learn More - About Hydraulic Safety Insight



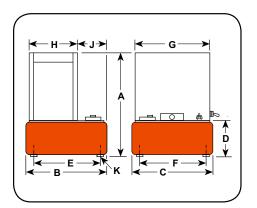
Looking for great safety suggestions? Visit our Resource Section to get a better understanding of hydraulic and mechanical safety insights on what to look for when working around hydraulics



#### **Optional Cylinders**

Power Team offers a wide variety of single-acting, double-acting, lock nut, pancake and center hole cylinders to meet your requirements.





#### Technical Dimensions

Order	Α	В	С	D	Е	F	G	Н	J	K**	Max.	rpm	dBA at	(	Dil Del. (	l/min. @	)	Prod.
No.											Pressure Output		Idle and 700	7	70	350	700	Wt. † with Oil
	(mm)	(in.)	(bar)		(bar)	(bar)	(bar)	(bar)	(bar)	(kg)								
PE21 Series	543	292	241	165	254	203	359	82,6	3.25	1/2-20 UNF	700	1437	70*	3,6	0,4	0,4	0,3	44,4 †

<sup>\*\*</sup> For 2" dia. swivel casters, order (4) No. 10494.

#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw @ 700 †† (bar)	Motor	Reservoir Usable Oil Cap. (L)
Single-Acting	0,75 kW pump with 9,5 liter reservoir and manual valve.	PE213-50-220	3-Way	9520*	Advance Hold Return	115V -15 amps 230V -7.5 amps	0,75 kW, 220 Volt 50 Hz, Single Phase	9,4
Single-Acting	PE213, except has solenoid operated remote valve.	PE213S-50-220	3-Way	9599†	Advance Hold Return	115V -15 amps 230V -7.5 amps	0,75 kW, 220 Volt 50 Hz, Single Phase	9,4
Double-Acting	0,75 kW pump with 9,5 liter reservoir and manual valve.	PE214-50-220	4-Way	9506*	Advance Hold Return	115V -15 amps 230V -7.5 amps	0,75 kW, 220 Volt 50 Hz, Single Phase	9,4
Double-Acting	PE214, except has solenoid operated remote valve.	PE214S-50-220	4-Way	9512†	Advance Hold Return	115V -15 amps 230V -7.5 amps	0,75 kW, 220 Volt 50 Hz, Single Phase	9,4

<sup>\*</sup> Manual valve. Pump is equipped with RUN/OFF/PULSE switch for control of motor.

**NOTE**: Some Power Team pumps are available in special configurations not listed in this catalog. For your special requirements please consult your local distributor or the Power Team Customer Service.

<sup>†</sup> Shipping weight with manual valve, add 14 kg for pump with solenoid valve.

<sup>†</sup> Solenoid valve. Pump is equipped with a remote control switch with 3,1 m cord.

<sup>††</sup> Pre-wired at factory for this voltage. PE21 series available in 230V 60Hz or 220V 50Hz. Please specify when ordering. Example: for 60Hz order PE213-230; for 50Hz order PE213-50-220.

Pumps

Model Shown: PED253, PED254, PED254S



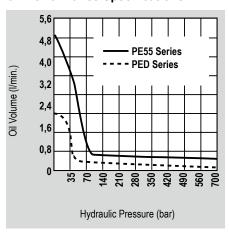
#### Features

# IDEAL FOR RUNNING MULTIPLE TOOLS OR CYLINDERS FROM ONE POWER UNIT. RECOMMENDED FOR CYLINDERS UP TO 75 TONS.

- Two-speed pumps have the same low pressure and high pressure flows from both valves.
- Flows and pressures of each pump are independent.
- Delivers 4,8 l/min. of oil @ 7 bar and 0,4 l/min. @ 700 bar from each pump.
- 1,12 kW, 110/115V, 60 Hz induction motor, 3,1 m remote control and 19 l steel reservoir.
- Models available for operating single-acting or double-acting cylinders.
- Each power unit contains two separate pumps and two separate valves allowing operator to control multiple processes with one power unit.
- Both pumps on each power unit are equipped with an externally adjustable pressure relief valve.
- Not recommended for frequent starting and stopping.
- Non CE

▶ PED series pump and RD5513 cylinder used in a special press that produces pharmaceutical-grade extracts for herbal medicines.









#### 4 Port Control Manifold

For independent multiple-cylinder operation, feature needle valves for precise manual control. Designed for remote-mounted applications.

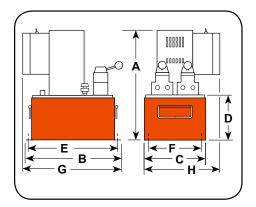
Ordering Information: 9644



#### **Hydraulic Fluids**



For dependable performance of all your hydraulic pumps and cylinders. Power Team specialty blended oils contains foam suppressant additives and has a high viscosity index. Refer to the Accessories section for complete



#### **Technical Dimensions**

Order	Α	В	С	D	Е	F	G	Н	Max.	rpm	dBA at	Amp Draw		Oil Del. (	[l/min. @]	)	Prod.
No.									Pressure Output		Idle and 700	220V at 700	7	70	350	700	Wt. with Oil
	(mm)	(bar)		(bar)	(A)	(bar)	(bar)	(bar)	(bar)	(kg)							
PED Series	527	457	292	216	419	229	457	330	700	2874	87/85*	11	4,8	0,6	0,6	0,4	77

<sup>\*\*</sup> Amp draw at 700 bar, 230V 50/60 Hz is 15 Amps.

#### **Ordering Information**

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable Oil Cap. (cm3)	Reservoir Usable (I)
Single-Acting	1,12 kW pump with 19 liter reservoir. Valve has Posi-Check feature.	PED253	PED253-50-220	3-Way	9520	Advance Return	Remote Motor	1,12 kW, 220 V 50 Hz, Single Phase	16
Double-Acting	1,2 kW pump with 19 liter reservoir. Valve has Posi-Check feature.	PED254	PED254-50-220	4-Way	9506	Advance Hold Return	Remote Motor	1,12 kW, 220 V 50 Hz, Single Phase	16
Double-Acting	PED254, expect has solenoid operated remote valve.	PED254S	PED254S-50-220	4-Way	9513	Advance Hold Return	Remote Control	1,12 kW, 220 V 50 Hz, Single Phase	16

NOTE: All remotes are 3,1 m long.

# PE30 SERIES

Model Shown: PE302S, PE302

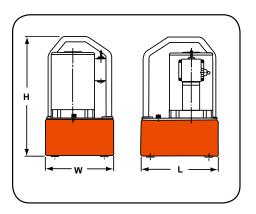




## PE30TWP



For Torque Wrench Pump Configurations, refer to the Tools Section.

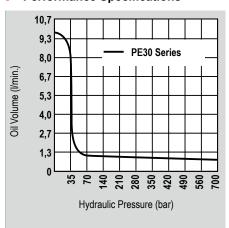


#### Features

# IDEAL FOR MAINTENANCE AND CONSTRUCTION APPLICATIONS

- Deliver a powerful punch to operate single-acting or double-acting cylinders.
- Integral roll cage protects pump from abuse.
- 0,75 kW, single-phase, permanent magnet motor.
- High-performance-to-weight ratio.
- Starts under full load even when voltage is reduced to 50% of nominal rating.
- Quiet operation: 82 dBA @ 700 bar and 87 dBA @ 0 bar.
- Remote controls and/or solenoid valves feature 24V controls.
- CSA rated for intermittent duty.
- Non CE

#### Performance Specifications



#### Technical Dimensions

Order	Ove	rall Dimens	ions	Max.	dBA at	Amp Draw		Oil	Del. (I/min	. @)		Prod.
No.	Length	Width	Height	Pressure Output	Idle and 700	220V at 700	7	35	70	350	700	Wt. with Oil
	(mm)	(mm)	(mm)	(bar)	(bar)	(A)	(bar)	(bar)	(bar)	(bar)	(bar)	(kg)
PE30 Series with 4,7 liter reservoir	254	229	406	700	87/82	7	4,8	3,2	0,7	0,6	0,5	18,6
PE30 Series with 7,6 liter reservoir	343	241	419	700	87/82	7	4,8	3,2	0,7	0,6	0,5	22,2



#### **Ordering Information**

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor (4,000 rpm)	Reservoir Usable Oil Cap. (I)
Single-Acting	Base model 0,75 kW pump with 4,7 liter reservoir and 2 position valve.	PE302-220∞	3-Way, 2 Position	9584	Hold Advance Return	On/Off Pulse Switch	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Single-Acting	PE302-220, except has 6,6 liter reservoir.	PE302-2-220	3-Way, 2 Position	9584	Hold Advance Return	On/Off Pulse Switch	0,75 kW 220/230 V, 50 Hz, Single Phase	6,1 ***
Single-Acting	PE302-220, except has remote motor control.	PE302R-220	3-Way, 2 Position	9584	Hold Advance Return	Remote Motor Control (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Single-Acting	PE302R-220, except has 6,6 liter reservoir.	PE302R-2-220	3-Way, 2 Position	9584	Hold Advance Return	Remote Motor Control (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	6,1 ***
Single-Acting	PE302R-220, except also has solenoid operated remote valve.	PE302S-220	3-Way, 2 Position	9570	Hold Advance Return	Remote Motor & Valve (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Single-Acting	PE302S-220, except has 6,6 liter reservoir.	PE302S-2-220	3-Way, 2 Position	9570	Hold Advance Return	Remote Motor & Valve (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	6,1 ***
Single-Acting	PE302-220, except has "Auto Dump" valve	PE302A-220∞	Auto Dump	9610	Automatic Pilot Operation	Remote Motor Control (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Single-Acting	Base model 0,75 kW pump with 4,7 liter reservoir and 3 position valve.	PE303-220	3-Way, 3 Position	9520*	Advance Hold Return	On/Off Pulse Switch	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Single-Acting	PE303-220, except has 6,6 liter. reservoir.	PE303-2-220	3-Way, 3 Position	9520*	Advance Hold Return	On/Off Pulse Switch	0,75 kW 220/230 V, 50 Hz, Single Phase	6,1 ***
Single-Acting	PE303-220, except has remote motor control.	PE303R-220	3-Way, 3 Position	9520*	Advance Hold Return	Remote Motor Control (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Single-Acting	PE303R-220, except has 6,6 liter reservoir.	PE303R-2-220	3-Way, 3 Position	9520*	Advance Hold Return	Remote Motor Control (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	6,1 ***
Double-Acting	Base model 0,75 kW pump with 4,7 liter reservoir and 4-way valve for double-acting systems	PE304-220	4-Way, 3 Position Tandem Center	9506*	Advance Hold Return	On/Off Pulse Switch	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Double-Acting	PE304-220, except has 6,6 liter reservoir.	PE304-2-220	4-Way, 3 Position Tandem Center	9506*	Advance Hold Return	On/Off Pulse Switch	0,75 kW 220/230 V, 50 Hz, Single Phase	6,1 ***
Double-Acting	PE304-220, except has remote motor control.	PE304R-220	4-Way, 3 Position Tandem Center	9506*	Advance Hold Return	Remote Motor Control (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	4,5 **
Double-Acting	PE304R-220, except has 6,6 liter reservoir.	PE304R-2-220	4-Way, 3 Position Tandem Center	9506*	Advance Hold Return	Remote Motor Control (3,1 m)	0,75 kW 220/230 V, 50 Hz, Single Phase	6,1 ***

Posi-Check®valve design, Posi-Check® guards against pressure loss when valve is shifted from "advance" to "hold" position.

<sup>\*\*</sup> Shipped with 3,8 I of oil (3,4 I, 210 usable).

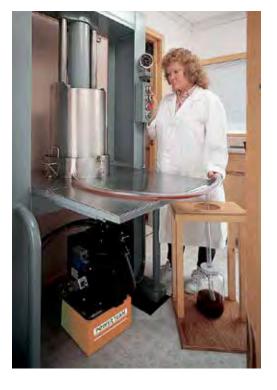
<sup>\*\*\*</sup> Shipped with 7,6 I of oil.

Not to be used for lifting applications. Best suited for crimping, pressing & punching applications. NOTE: For 220/230V, 50/60 Hz. add suffix "- 220" (example PE302-220).

Model Shown: PE462-E220



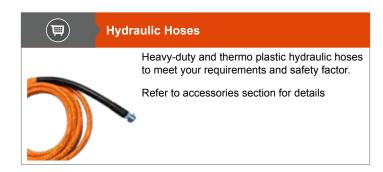
PE46 series pump and RD5513 cylinder used in a special press that produces pharmaceutical-grade extracts for herbal medicines.



#### Features

# BEST SUITED FOR UNDER-THE-ROOF MAINTENANCE AND PRODUCTION APPLICATIONS.

- Two-speed high-performance pump.
- For use with single or double-acting cylinders at operating pressures up to 700 bar.
- Equipped with a 1,12 kW, 2875 rpm single-phase, 50 Hz thermal protected induction motor that starts under full load. Noise level of 77-81 dBA.
- All equipped with a 3,1 m remote control except PE462S which has a 7,6 m remote control.
- 24V control circuit on all units with remote control.
- CSA rated for intermittent duty.

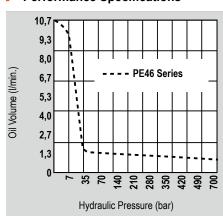


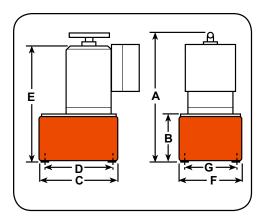
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#### **Hydraulic Fluids**



For dependable performance of all your hydraulic pumps and cylinders. Power Team specialty blended oils contains foam suppressant additives and has a high viscosity index. Refer to the Accessories section for complete details





#### **Technical Dimensions**

Order No.	A	В	С	D	Е	F	G	Max. Pressure	rpm	dBA at Idle and	Amp Draw 220V	(	Dil Del. (l	/min. @)	t	Prod. Wt.
								Output		700	at 700	7	70	350	700	with Oil
	(mm)	(bar)		(bar)	(A)	(bar)	(bar)	(bar)	(bar)	(kg)						
PE46 Series	499	173	292	254	378	241	203	700	2,875	77/81*	13**	6,7	6,0	0,7	0,6	35,8
PE46-E220	499	173	292	254	378	241	203	700	2,875	77/81*	13**	6,7	6,0	0,7	0,6	41,3

<sup>\*</sup> Measured at 0,9 m. distance, all sides. \*\* Requires 20 amp circuit.

#### **Ordering Information**

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch ††	Motor	Reservoir ***Usable Oil Cap. (I)
Single-Acting	Base model 1,12 kW pump with 9,5 liter metal reservoir	PE462-50-220	3-Way	9584	Advance Return†	Remote Motor Control (3,1 m) on/off	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Single-Acting	PE462-50-220, except has solenoid valve	PE462S-50-220	3-Way	9570	Advance Return**	Remote Motor Valve (7,6 m)	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Single-Acting	PE462-50-220, except has "dump valve"	PE462A-50-220∞	"Auto/ Dump 3-Way "	9610	Advance Return	Remote Motor Control (3,1 m) on/off	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Single-Acting	1,12 kW pump with 9,5 liter metal reservoir Meets CE requirement	PE462-E220	3-Way	9584	Advance Return†	Remote Motor Control (3,1 m) on/off	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Single-Acting	PE462-50-220, except has solenoid valve Meets CE requirement	PE462S-E220	3-Way	9570	Advance Return**	Remote Motor Valve (7,6 m)	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Single-Acting	PE462-50-220, except has "dump valve". Meets CE requirement	PE462A-E220	"Auto/ Dump 3-Way "	9610	Advance Return	Remote Motor Control (3,1 m) on/off	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Double-Acting/ Multi-Single Acting	PE462-50-220, except has 9500 double-acting valve.	PE464-50-220	4-Way	9500	Advance Hold Return†	Remote Motor Control (3,1 m) on/off	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Double-Acting/ Multi-Single Acting	Same as PE464-50-220 Meets CE requirement	PE464-E220	4-Way	9500	Advance Hold Return†	Remote Motor Control (3,1 m) on/off	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Double-Acting/ Multi-Single Acting	PE462S-50-220 Meets CE requirement	PE464S-E220	3/4-Way	9592	Advance Return**	Remote Motor/Valve (3,1 m)	1,12 kW, 220 V* 50 Hz, Single Phase	9,4
Double-Acting/ Multi-Single Acting	PE462S-50-220, except has 9592 double-acting valve	PE464S-50-220	3/4-Way	9592	Advance Return**	Remote Motor/Valve (3,1 m)	1,12 kW, 220 V* 50 Hz, Single Phase	9,4

<sup>\*</sup> Available with 220V 50 Hz motor (to order, place suffix "50-220" behind pump order number). Specify voltage when ordering.

\*\* Advance position holds pressure with motor shut-off.

\*\*\* Usable oil is calculated with the oil fill at the recommended level of 1.50" below reservoir cover plate.

† Advance position holds pressure with motor shut-off. Return position returns cylinder.

<sup>†</sup> Typical delivery. Actual flow will vary with field conditions.

<sup>††</sup> The remote motor control switch on PE46 series pumps is 24V.

<sup>∞</sup> Not to be used for lifting. When pump is shut-off, oil returns to reservoir.

Model Shown: PE55-E220





#### Features

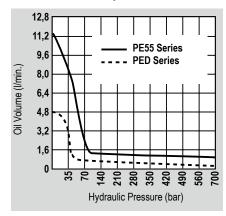
# INDUSTRY LEADING HEAVY-DUTY PUMP FOR MULTIPLE APPLICATIONS

- 0,84 kW, 12000 rpm, 220V, 50/60 Hz universal motor.
   Draws 25 amps at full load, starts at reduced voltage.
- True unloading valve achieves greater pump efficiency, allowing higher flow at maximum pressure.
- Reservoirs available in sizes up to 38 l, refer to pump accessories page.
- Lightweight and portable. Best performance-to-weight ratio of all Power Team pumps.
- 3,1 m remote motor control.

# Torque Wrench Pumps For Torque Wrench Pump Configurations, refer to the Tools Section.

# 4 mounting holes 1/2"-20 A D C B G

#### ▶ Performance Specifications



#### Technical Dimensions

Order No.	A	В	С	D	Е	F	G	Max. Pressure	rpm	dBA at	Amp Draw 230V	(	Oil Del. (	l/min. @	)	Prod. Wt.
								Output		700	at 700	0	50	350	700	with Oil
	(mm)	(bar)		(bar)	(A)	(bar)	(bar)	(bar)	(bar)	(kg)						
PE55 Series	464	292	241	178	254	203	356	700	12000	90/89*	13	11,3	7,1	1,2	0,9	29,4
PE55-E220	520	292	241	178	254	203	391	700	12000	90/89*	13	11,3	7,1	1,2	0,9	29,4



#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable Oil Cap. (I)
Single-Acting	Base model 0,84 kW pump with 9,5 liter reservoir, remote motor control	PE552-50-220	3-Way	9582	Advance Return**	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Single-Acting	PE552-50-220, except also has solenoid operated remote valve	PE552S-50-220	3-Way	9570	Advance Hold Return	Remote Motor & Valve	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Single-Acting	PE552-50-220, except has Auto Dump valve	PE552A-50-220	Auto/ Dump	9610	Advance Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Single-Acting	0,84 kW pump with 9,5 liter reservoir. Valve has Posi-Check feature.	PE553-50-220	3-Way†	9520	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Single-Acting	Same as PE552-20-220, but meets also CE requirement	PE552-E220	3-Way	9584	Advance Return**	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Single-Acting	Same as PE552S, but meets also CE requirement	PE552S-E220	3-Way	9570	Advance Return	Remote Motor & Valve	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Single-Acting	Same as PE552A-50-220, but meets also CE requirement	PE552A-E220∞	Auto/ Dump	9610	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Single-Acting	Same as PE553-50-220, but meets also CE requirement	PE553-E220	3-Way	9520	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	Base model 0,84 kW pump with 9,5 liter reservoir, and 4-way valve for double-acting systems	PE554-50-220	4-Way†	9506	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	Same as PE554-50-220 but meets also CE requirement	PE554-E220	4-Way†	9506	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	PE554-50-220, except has 9500 tandem center valve.	PE554T-50-220	4-Way	9500	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	For use with single-acting Spring Seat, Stressing Jack or double-acting cylinder.	PE554P-50-220	4-Way	9500	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	For use with single- or double-acting Power Seat, Stressing Jacks ONLY	PE554PT-50-220	4-Way	9628	Advance Hold Sequenced Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	Pump suitable to run multiple spring return tools	PE554C-50-220	4-Way	9511 †††	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	Pump equipped with 3/4-Way solenoid valve.	PE554S-50-220	3/4-Way	9552	Advance Hold Return	Remote Motor & Valve	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	Pump suitable to run multiple Spring return cylinder Meets CE requirement	PE554C-E220	4-Way	9511 †††	Advance Hold Return	Remote Motor	0,84 kW*, 220 V 50 Hz, Single Phase	8,4
Double-Acting	Pump equipped with 3/4-way solenoid valve Meets CE requirement	PE554S-E220	3/4-Way	9552	Advance Hold Return	Remote Motor & Valve	0,84 kW*, 220 V 50 Hz, Single Phase	8,4

<sup>\*</sup> Pumps available with 115V, 50 Hz motors. Specify E110 when ordering.

<sup>\*\*</sup> Holds with motor shut-off.

<sup>†</sup> Valves have Posi-Check® feature.

<sup>††</sup> All remotes are 3,1 m long.

<sup>†††</sup> Valving allows alternate and independent operation of two different spring return tools. Valve holds pressure only while valve is in "A" or "B" port position with pump motor shut-off.

 $<sup>\</sup>infty$  Not to be used for lifting.

Also available in E110 (meets CE requirement)

# Model Shown: PE604T, PE604PT



#### The PE60 used for pre-stressing application

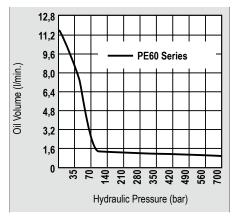




#### Features

# COMPACT, LIGHTWEIGHT PUMP. EXCELLENT CHOICE FOR RUGGED APPLICATIONS AND LOW VOLTAGE STARTING.

- Pump offers long, trouble-free life in the most demanding work environments.
- For operating single or double-acting cylinders, or stressing jacks.
- Powered by 0,84 kW, 220V, 50/60 Hz single-phase motor. Starts under load, even at reduced voltages at construction sites.
- Optional fan-driven external oil cooler includes rollover guard.
- Insulated carrying handle.
- Integral 102 mm. fluid-filled pressure gauge with steel bezel complies with ASME B40.1 Grade A.
- Sealed 4,34 I (usable) reservoir. Reservoir drain port is standard.
- Oil level sight gauge for accurate oil level monitoring.
- External spin-on filter removes contaminants from circulating oil to maximize pump, valve and cylinder/ tool life.
- CSA rated for intermittent duty.
- Non CE.



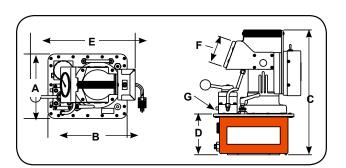


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#### **Hydraulic Fluids**



For dependable performance of all your hydraulic pumps and cylinders. Power Team specialty blended oils contains foam suppressant additives and has a high viscosity index. Refer to the Accessories section for complete details





#### Learn More - About Hydraulic Safety Insight



Looking for great safety suggestions? Visit our Resource Section to get a better understanding of hydraulic and mechanical safety insights on what to look for when working around hydraulics

#### Technical Dimensions

Order No.	A	В	С	D	Е	F	G	Max. Pressure	rpm	dBA at Idle and	Amp Draw 220V		Oil Del.	(I/min. @	2)	Prod. Wt.
								Output		700	at 700	0	50	350	700	with Oil
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(bar)		(bar)	(bar)	(bar)	(bar)	(bar)	(bar)	(kg)
PE604T	263,5	301,6	457,2	152,4	381	101,6	3/8 NPTF	700	10.000	80/85*	13	11,3	7,1	1,2	0,9	27,2
PE604PT	263,5	301,6	457,2	152,4	381	101,6	3/8 NPTF	700	12.000	80/85*	13	11,3	7,1	1,2	0,9	27,2

NOTE: Unloading pressure is 70 bar.

#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Control Switch	Motor	Reservoir Usable Oil Cap. (I)
Single-Acting, Spring Seat, Stressing Jack or Double-Acting	0,84 kW pump with 3,73 liter reservoir & valve for double-acting systems.	PE604T	4-Way/ 3 Position	9500	Advance Hold Return	On/Off Pulse	0,84 kW, 220 V 50 Hz, Single Phase	4,34
Single-Acting or Double-Acting Power Seat, Stressing Jacks Only	PE604T, except has special valve for post tensioning application only.	PE604PT	4-Way/ 3 Position	9628 Model C	Advance Hold Sequenced Return	On/Off Pulse	0,84 kW, 220 V 50 Hz, Single Phase	4,34

**NOTE:** Contact Factory for PE60 pump models with other control and valve options.

NOTE: For 220/230V, 50/60 Hz, single-phase models, add -220 suffix.

Model Shown: PQ603, PQ604, PQ604S







#### Features

# PUMP DESIGNED SPECIFICALLY FOR HEAVY- DUTY, EXTENDED CYCLE OPERATION.

- For operating single or double-acting cylinders.
- Metal shroud keeps dirt and moisture out of motor and electrical components.
- Electrical shut-down feature prevents unintentional restarting of motor following an electrical service interruption.
- Internal relief valve limits pressure to 700 bar.
- External relief valve is adjustable from 70 to 700 bar.
- Pumps operate below maximum OSHA noise limitation (74-76 dBA).
- Start and operate under full load, even with voltage reduced by 10%.
- CSA rated for intermittent duty.
- Non CE.

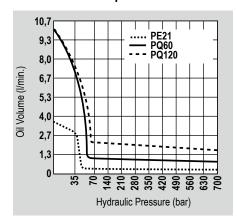
#### **Hydraulic Fluids**



For dependable performance of all your hydraulic pumps and cylinders. Power Team specialty blended oils contains foam suppressant additives and has a high viscosity index. Refer to the Accessories section for complete details

#### Hydraulic Machine Press Operation



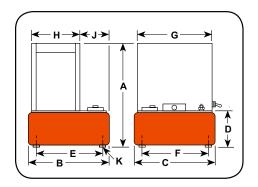




#### **Universal Pump Cart**



Mobilize your hydraulic pumps with the cart # PC200 - refer to the accessories section for details. Cart can be used with the following pumps; PA60, PA64, PA55/PE55, PE18, PE21, PQ60, PQ120, PG55 series and pumps with optional 5- and 10-gallon reservoirs; Nos. RP50, RP51, RP101 and RP103. (Pump not included)



order No.	Description	Wt. (kg)
10494	2" dia. swivel casters (4 Required)	0,1

#### Technical Dimensions

Order	Α	В	С	D	Е	F	G	Н	J	К	Max.	rpm	dBA at	(	Dil Del.	(I/min.	@)	Prod.
No.											Pressure Output		Idle and 700	7	70	350	700	Wt. with Oil
	(mm)	(mm)	(bar)		(bar)	(bar)	(bar)	(bar)	(bar)	(kg)								
PQ60 Series	638	362	394	184	308	338	373	237	122,2	1/2-20 UNF	700	1,437	74/76*	9,7	0,9	0,9	0,8	76,6**

<sup>\*</sup> Measured at 3 ft. distance, all sides.

#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw @ 700 (bar)	Motor ††	Reservoir Usable Oil Cap. (I)
Single-Acting	1,49 kW pump with 21,6 liter reservoir and manual valve	PQ603	3-Way	9520*	Advance Hold Return	115V -22 amps 230V -11 amps	1,49 kW, 220 Volt 50 Hz, Single Phase	20
Single-Acting	PQ603, except has solenoid operated remote valve	PQ603S	3-Way	9599†	Advance Hold Return	115V -22 amps 230V -11 amps	1,49 kW, 220 Volt 50 Hz, Single Phase	20
Double-Acting	1,49 kW pump with 21,6 liter reservoir and manual valve	PQ604	4-Way	9506*	Advance Hold Return	115V -22 amps 230V -11 amps	1,49 kW, 220 Volt 50 Hz, Single Phase	20
Double-Acting	PQ604, except has solenoid operated remote valve.	PQ604S	4-Way	9512†	Advance Hold Return	115V -22 amps 230V -11 amps	1,49 kW, 220 Volt 50 Hz, Single Phase	20

<sup>\*</sup> Manual valve. Pump is equipped with RUN/OFF/PULSE switch for control of motor.

<sup>\*\*</sup> Total weight with oil and 3-way solenoid valve. Subtract 4,5 kg to obtain weight of pump with manual valve.

<sup>†</sup> Solenoid valve. Pump is equipped with a remote control switch with 3,1 m cord.

<sup>††</sup> PQ60 series also available in 115V, 60 Hz or 220V, 50 Hz. Please specify when ordering. Example: for 60 Hz order PQ603-115; for 50 Hz order PQ603-50-220.

NOTE: Some Power Team pumps are available in special configurations not listed in this catalog. For your special requirements please consult your local distributor or the Power Team factory.

Model Shown: PQ1204S-E380



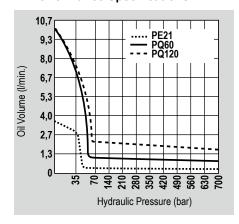
#### Features

# PUMP DESIGNED SPECIFICALLY FOR HEAVY- DUTY, EXTENDED CYCLE OPERATION.

- Start and operate under full load, even with voltage reduced by 10%.
- Electrical shut-down feature prevents unintentional restarting of motor following an electrical service interruption.
- Internal relief valve limits pressure to 700 bar.
- External relief valve is adjustable from 70 to 700 bar.
- Pump pre-wired at factory with a 2,24 kW, 400V, 50 Hz, three-phase motor. Other electrical configurations are available. See ordering information on the following page.
- 24 volt control circuit on units with remote control for added user/operator safety.
- Thermal overload protection, motor starter and heater element supplied as standard equipment.

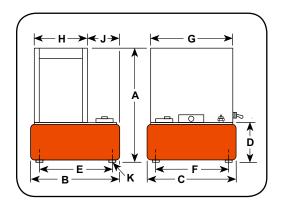
PQ series pump used to drive piers to lift and stabilize building foundation.

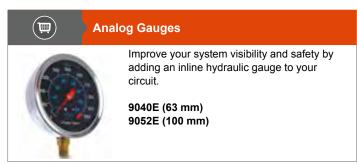












#### Technical Dimensions

Order				,	_	_					Max.	rpm	dBA at		il Del. (	l/min. @	2)	Prod.
No.	А	В	C	О	E	r	G	н	J	K	Pressure Output		Idle and 700	0	70	350	700	Wt. ** with Oil
	(mm)	(bar)		(dBA)	(bar)	(bar)	(bar)	(bar)	(kg)									
PQ120 Series	638	362	394	184	308	338	373	237	122	1/2-20 UNF	700	1437	73/78	9,7	2,1	1,7	1,6	74,3

<sup>\*\*</sup>Total weight with oil and 3-way solenoid valve. Subtract 4,5 kg to obtain weight of pump with manual valve.

#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw @ 700 (bar)	Motor	Reservoir Usable Oil Cap. (I)
Single-Acting	2,24 kW pump with 21,6 liter reservoir and manual valve.	PQ1203-E380	3-Way	9520*	Advance Hold Return	230V -10.5 amps 400V - 6 amps	2,24 kW, 400 Volt 50 Hz, 3 Phase	20
Single-Acting	PQ1203, except has solenoid operated remote valve.	PQ1203S-E380	3-Way	9599†	Advance Hold Return	230V -10.5 amps 400V - 6 amps	2,24 kW, 400 Volt 50 Hz, 3 Phase	20
Double-Acting	2,24 kW pump with 21,6 liter reservoir and manual valve.	PQ1204-E380	4-Way	9506*	Advance Hold Return	230V -10.5 amps 400V - 6 amps	2,24 kW, 400 Volt 50 Hz, 3 Phase	20
Double-Acting	PQ1204, except has solenoid operated remote valve.	PQ1204S-E380	4-Way	9512†	Advance Hold Return	230V -10.5 amps 400V - 6 amps	2,24 kW, 400 Volt 50 Hz, 3 Phase	20

<sup>\*</sup> Manual valve. Pump is equipped with RUN/OFF/PULSE switch for control of motor.

 $<sup>\</sup>ensuremath{\uparrow}$  Solenoid valve. Pump is equipped with a remote control switch with 3,1 m cord.

Model Shown: **PE4004S** 



PE4004S pump and RD3006 cylinder used in a special press which repairs damaged chain links for the shipping industry.



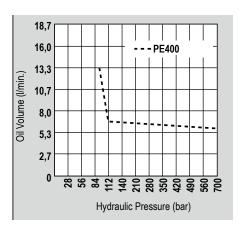




#### Features

# PUMP DESIGNED SPECIFICALLY FOR HEAVY- DUTY, EXTENDED CYCLE OPERATION.

- Two-speed high output pump delivers up to 16 l/min of oil.
- Low noise level of 73-80 dBA.
- Integral electrical shut-down feature prevents unintentional restarting of motor following an electrical service interruption. Over-current protection prevents damage to motor as a result of overheating.
- "Stop" and "Start" control buttons are 24VDC.
- PE4004 has a 4-way/3-position manual valve.
- PE4004S has a 4-way/3-position solenoid valve with a 24VDC remote hand switch.
- External pressure relief valve is adjustable from 100 to 700 bar.
- Heavy-duty 50,8 mm diameter casters assure easy maneuvering.
- 75,7 I (62,8 I usable) reservoir has a low oil level sight gauge.
- Powered by a dual voltage 7,46 kW, 3 phase, 1437 rpm motor.
- 3 phase motor has all the electrical components necessary to operate the pump. The customer has no hidden charges when making a purchase.
- Deliver 16 l/min. of oil @ 15 bar, 5,6 l/min. of oil @ 700 bar.
- CE rated.



#### Analog Gauges



Improve your system visibility and safety by adding an inline hydraulic gauge to your circuit.

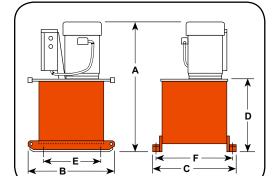
9040E (63 mm) 9052E (100 mm)

#### **Load Lowering Valve**



Precision metering for controlled cylinder piston return. Operation: Permits free flow when extending cylinder, built-in pressure relief and Posi-Check® locks and holds load in raised position until operator opens valve.

Ordering number: 9596



#### Learn More - About Hydraulic Safety Insight



Looking for great safety suggestions? Visit our Resource Section to get a better understanding of hydraulic and mechanical safety insights on what to look for when working around hydraulics

#### **Technical Dimensions**

Order No.	Α	В	С	D	Е	F	Max. Pressure	rpm	dBA at Idle and	Max. Amp Draw		Oil Del. (	l/min. @)		Prod. Wt. *
							Output		700	@ 700 bar	15	90	350	700	with Oil
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(bar)		(dBA)	(A)	(bar)	(bar)	(bar)	(bar)	(kg)
PE4004-E380	924	635	610	540	394	546	700	1,437	73/80	15,5	16	15	6	5,6	223
PE4004S-E380	924	635	610	540	394	546	700	1,437	73/80	15,5	16	15	6	5,6	229

<sup>\*</sup> Add 5" and 8 kg when casters are mounted. (Units are supplied with four 4" dia. swivel casters.)

#### **Ordering Information**

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw @ 700 bar	Motor	Reservoir Usable Oil Cap. †
Double-Acting	7,46 kW pump with 75,5 liter reservoir and manual valve.	PE4004-E380	4-Way	9506	Advance Hold Return	400V -15.5 amps	7,46 kW, 4000 volt 50 Hz, 3 Phase	62,8
Double-Acting	PE4004, except has solenoid operated remote valve.	PE4004S-E380	4-Way	9512*	Advance Hold Return	400V -15.5 amps	7,46 kW, 4000 volt 50 Hz, 3 Phase	62,8

<sup>\*</sup> Solenoid valve with remote control.

<sup>†</sup> Usable oil is calculated with oil fill at recommended level at 2.25" below cover plate.

NOTE: Valves for spring return cylinders are available upon request. Consult the factory.



Model Shown: MCS-PE554-8



Power Team supplied the lift equipment expertise for this drag line maintenance operation to successfully complete the job on time.



#### Features

# SYNCHRONIZED POWER UNIT FOR POSITIONING, LIFTING OR LOWERING LOADS, ACCURATE TO +/- 1 MM.

- Basic systems includes eight (8) jacking points, contact Power Team for larger MCS system requirements.
- Safety features included: full stop due to power failure, sensor failure, pressure overload, tolerance error, uncontrolled load movement, etc.
- Intuitive graphic touch screen control.
- Displayed information includes: startup diagnostics, position of lift points relative to starting position, pressure at each lift point, status of each cylinder and status of alarms.
- MCS works with a wide range of cylinders types, tonnages and strokes to meet your application requirements.
- Operating pressure up to 700 bar.
- Standard system has a 151 I tank.



#### **Touch Screen Enclosure**



- Weather tight enclosure protects your investment while in storage.
- Hinged cover provides protection for HMI touch screen.
- Designed to act as a sun screen in bright conditions.



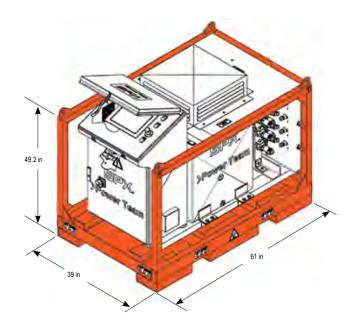
#### **Cylinder Selection**



Power Team recommends using 80% of the rated capacity and stroke to maximize product performance and safety.



#### **▶** Technical Dimensions



# (i

#### **Training Provided**



Every MCS includes one day of on-site training at one of SPX FLOW's Regional Headquarters (Rockford, IL USA, Singapore or Netherlands). Training includes both classroom and hands-on instruction. Travel & lodging not included.



#### **Optional Cylinders**

Power Team offers a wide variety of single-acting, double-acting, lock nut, pancake and center hole cylinders to meet your requirements.



#### Hardware Included



Motion Control System (MCS) is protected with a robust cage and reusable shipping container.



Linear Displacement Sensors have a range of 500 mm. Two cases with four sensors included. Refer to the ordering table for the 1000 mm ordering option.



Cables for sensors are 30,5 m. in length, eight sets and a hard plastic case.



Electrical plug female connector allows for quick attachment to your line cord.

#### Ordering Information

Order No.	Max. Lift Points	Pump Flow @ 700 (bar.)	Reservoir Size	Motor Voltage	Max. Pressure	Valves Included	Transducers Included	Weight with oil
		(I/ min.)	(I)		(bar.)			(kg)
MCS-PE554-8	8	0,9		(230V,1Ø)				771
MCS-PQ1204-8	8	1,97		(230V, 3Ø, 60 Hz)		4.W (0.D	Pressure	780
MCS-PQ1204-460-8	8	1,97	150	(460V, 3Ø, 60 Hz)	700	4-Way / 3-Pos. &	& Linear	780
MCS-PQ1204-50-220-8	8	1,97		(220V, 3Ø, 50 Hz)		2-Way / 2-Pos.	Position (500 mm)	780
MCS-PQ1204-50-380-8	8	1,97		(380V, 3Ø, 50 Hz)				780

Note: To upgrade to a 1000 mm linear position sensor, add "-1M" to the end of the part number. Example MCS-PE554-8-1M.



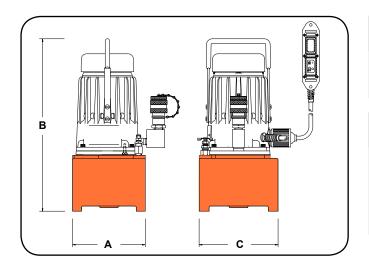
Model Shown: **PE-NUT** 



#### Features

# EXTREMELY DURABLE YET LIGHTWEIGHT AND OPERATE UNDER LOW-LINE VOLTAGE CONDITIONS.

- 0,46 kW universal electric motor (50 Hz cycle), intermittent duty pump.
- Two-stage pump for rapid ram advance.
- Operational under low-line voltage conditions.
- Designed for use with spring-returned remote tools.
- High-pressure safety relief valve.
- Remote hand control with 3,1 m cord.
- Carrying handle.
- Factory filled oil reservoir.
- Pressure matched quick-coupler supplied.
- Piston-type high-pressure pump supercharged by a low-pressure pump.
- Optional operating pressures available (consult Power Team factory for details).
- Optional carrying case.
- Non CE.





#### CAUTION

DESIGNED FOR CRIMPING APPLICATIONS ONLY!

This system should not be used for lifting.



#### **Electrical Data**

Electric Motor	Electric Control
0,46 kW, 10,000 rpm 115V, 50 Hz	Remote control
11 amp current draw (115V @ 700 bar)	with 3,1 m cord

#### Ordering Information

Order		Overall Dimensions	5	Oil De	elivery	Rese	Prod.		
No.	Α	В	С	7 (bar)	700 (bar)	Oil	Usable	Wt.	
	Width	Length	Depth			Сар.	Oil Cap.	With Oil	
	(mm)	(mm)	(mm)	(l/min.)	(l/min.)	<b>(I)</b>	<b>(I)</b>	(kg)	
PE-NUT	165	365	210	2,62	0,49	6	2,8	12,6	
PE-NUTC*	165	365	210	2,62	0,49	6	2,8	12,6	

<sup>\*</sup> Includes Case



Model Shown:

#### PG1203/4S-CP



#### Features

# TWO-STAGE PUMP FOR CRIMPING APPLICATIONS PG1203-CP

- 6 hp Briggs & Stratton engine.
- Manual control valve.
- High-pressure safety relief valve.
- Protective roll cage.
- For use with single acting tools.

#### PG1203/4S-CP

- 5.5 hp Honda OHV-type engine.
- Solenoid valve with remote hand control with 3,1 m cord.
- Two-stage pump for rapid advance.
- High-pressure safety relief valve.
- Protective roll cage.
- For use with either single or double-acting tools.



#### **Hydraulic Hoses**

Heavy-duty and thermo plastic hydraulic hoses to meet your requirements and safety factor.

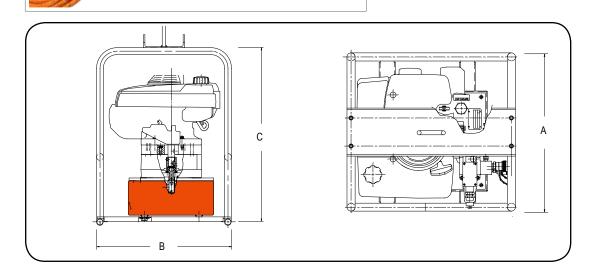
Refer to accessories section for details



#### **CAUTION**

DESIGNED FOR CRIMPING APPLICATIONS ONLY!

This system should not be used for lifting.



#### Ordering Information

Order		Overall Dimension	5	Oil De	elivery	Rese	rvoir	Prod.
No.	Α	В	С	7 (bar)	700 (bar)	Oil Cap.	Usable	Wt.
	Width	Length	Depth				Oil Cap.	With Oil
	(mm)	(mm)	(mm)	(l/min.)	(l/min.)	<b>(I)</b>	(I)	(kg)
PG1203-CP	502	552	622	8	2,1	11,3	7	25
PG1203/4S-CP	502	552	622	8	2,1	11,3	7	25

PG SERIES

Model Shown: PG304. PG554





Gasoline Powered Hydraulic Pumps like this PG303 help provide hydraulic force at remote locations.



#### Features

# GASOLINE POWER IDEAL FOR REMOTE LOCATIONS.

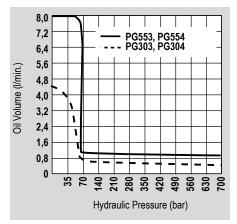
- A logical choice at work sites where electricity or compressed air are unavailable. For single or double-acting cylinders at operating pressures up to 700 bar.
- All gasoline engine/hydraulic pumps feature Posi-Check® valve to guard against pressure loss when valve is shifted from "advance" to "hold."

#### **PG303 AND PG304 (UP TO 75 TON)**

- Powered by a 4-cycle, 1,5 kW Honda engine giving it the lowest weight to horsepower ratio of all gasoline driven pumps.
- Has an aluminum reservoir with 6 I of usable oil.
- PG30 series pumps are equipped with roll cages to protect pump from damage.
- PG303 is for single-acting cylinders, has a 9520 valve with separate internal return line which allows oil from running pump to return to reservoir, independently of cylinder return oil, when valve is in "return" position.
- PG304 is for double-acting cylinders, has a 9506
   4-way (tandem center) valve.

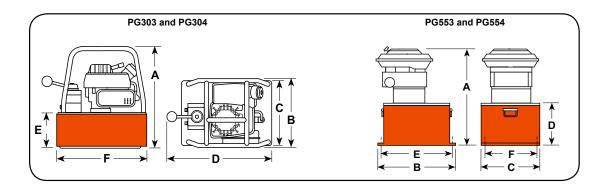
#### PG553 AND PG554 (UP TO 150 TON)

- 4,5 kW Intek "Diamond Edge" 4-cycle, by Briggs & Stratton.
- 19 liter reservoir.
- PG553 has a 9520 3-way valve for single-acting cylinders.
- PG554 has a 9506 4-way valve for double-acting cylinders.
- Optional roll cage available.









#### Technical Dimensions

Order No.	Α	В	С	D	E	F	Max. Pressure	rpm		Oil Del. (	l/min. @)		Prod. Wt.
							Output		7	70	350	700	with Oil
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(bar)		(bar)	(bar)	(bar)	(bar)	(kg)
PG303, PG304	378	264	241	406	130	343	700	6000	4,4*	0,6	0,6	0,5	14,5
PG553, PG554	559	457	318	219	422	229	700	3600	7,7	1,2	1,1	0,9	54,4

<sup>\*</sup> First stage oil delivery from 27,6 bar @ 3,7 l/min minimum.

#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Reservoir Usable Oil Cap. (I)	Horsepower	Cycle
Single-Acting	1,5 kW pump with 7,6 liter reservoir and single-acting valve.	PG303	3-Way	9520	Advance Hold Return	6	1,5	2
Single-Acting	4,5 kW pump with 21,6 liter reservoir and single-acting valve.	PG553	3-Way	9520	Advance Hold Return	20,8 **	4,5	4
Double-Acting	PG303, except has double-acting valve	PG304	4-Way	9506	Advance Hold Return	6	1,5	2
Double-Acting	PG553, except has double-acting valve	PG554	4-Way	9506	Advance Hold Return	20,8 **	4,5	4

<sup>\*</sup> Usable oil is calculated with oil fill at recommended level at 13 mm below cover plate.



Model Shown:

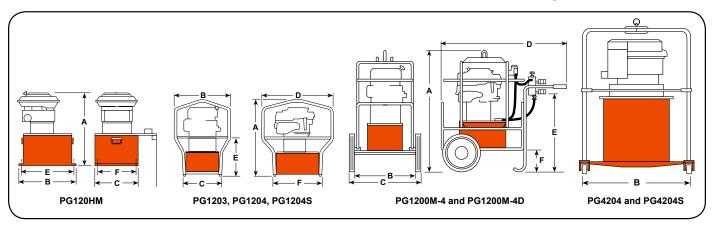
#### PG4204S, PG1204S, PG1200M-4D



#### Features

# TWO-SPEED HIGH-PERFORMANCE PUMPS IDEAL FOR CONSTRUCTION, STRUCTURE MOVING AND RIGGING APPLICATIONS.

- A logical choice at work sites where electricity or compressed air are unavailable. For single or doubleacting cylinders at operating pressures to 700 bar.
- All gasoline engine/hydraulic pumps feature Posi-Check® valve to guard against pressure loss when valve is shifted from "advance" to "hold."
- PG1200 Series pumps powered by a Honda 4-cycle, 5.5 hp engine with automatic decompression and electronic ignition. Deliver over 2,1 I of oil per minute at 700 bar.
- A 19 liter reservoir means adequate capacity for multicylinder applications. Dual element air cleaner protects engine from dusty environments.
- Heavy-duty "roll cage" provides pick-up points for lifting. Horizontal bars on PG1203, PG1204 and PG1204S protect unit, provide hand holds for carrying.
- Rubber anti-skid insulation on bottom of reservoir resists skidding and dampens vibration. PG1200M-4 and PG1200M-4D include a pump cart with 305 mm wheels.
- Adjustable external pressure regulator.
- CSA rated for intermittent duty.



#### Technical Dimensions

Order No.	Α	В	С	D	Е	F	Max. Pressure	rpm		Oil Del. (	l/min. @)		Prod. Wt.
							Output		7	70	350	700	with Oil
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(bar)		(bar)	(bar)	(bar)	(bar)	(kg)
PG120HM	584	394	362	483	338	308	700	3600	7,7	2,8	2,4	2,1	68
PG1203	708	514	362	667	343	464	700	3600	7,7	2,8	2,4	2,1	70
PG1204	708	514	362	667	343	464	700	3600	7,7	2,8	2,4	2,1	70
PG1204S	708	514	362	667	343	464	700	3600	7,7	2,8	2,4	2,1	73
PG1200M-4	1070	457	635	1080	667	184	700	3600	7,7	2,8	2,4	2,1	118
PG1200M-4D	1070	457	635	1080	667	184	700	3600	7,7	2,8	2,4	2,1	127
PG4204	1276	1321	1321	_	_	_	700	3600	19,8	17,9	7,6	6,4	197
PG4204S	1276	1321	1321	_	_	_	700	3600	19,8	17,9	7,6	6,4	200



#### PG1200M-4

- For single-acting cylinders. Has 9520 3-way/3-position (tandem center) valve, 9596 load-lowering valve and 9644 4-port manifold with individual needle valves at each port.
- Has a 9796 coupler and 9797 dust cap at each port. Valving permits precise individual control of up to four cylinders.
- A 9052 heavy-duty, fluid filled pressure gauge (0-700 bar) is included.

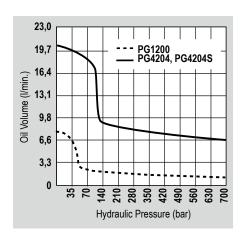
#### PG1200M-4D

- For single or double-acting cylinders with precise individual control of up to four cylinders possible.
- Equipped same as PG1200M-4, except has 9506 4-way/3-position (tandem center) valve, and second 4-port manifold without needle valves mounted beneath 9644 manifold for operating double-acting cylinders.

#### PG420 SERIES MAXIMUM OUTPUT HYDRAULIC POWER PACKAGE

- Ideal for single or multiple cylinder applications. Has a 4-cycle, 15 kW Honda engine and 76 l hydraulic reservoir (63 l usable) with low oil level sight gauge.
- Steel roll cage protects pump, has a lifting hook, and 102 mm dia. swivel casters provide mobility.
- Delivers 6,4 I of oil at maximum operating pressure.
- Has a 9506 4-way valve. On/off switch and speed control are protected by a panel. Sturdy molded case protects battery (not included).
- USA EPA Clean Air Act EVAP Certified Product.

#### Performance Specifications



#### Ordering Information

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Reservoir *Usable Oil Cap. (I)	Horsepower	Cycle
Single-Acting	Base model 4,1 kW gasoline pump with 22 liter reservoir.	PG1203	3-Way	9520	Advance Hold Return	20,8	4,1	4
Single-Acting	PG1203 with cart, roll cage, load lowering valve, 4 port manifold and gauge.	PG1200M-4	3-Way Manifold	9520 9644	Advance Hold Return**	20,8	4,1	4
Single-Acting/ Double-Acting	PG1200M-4D, except without Roll Cage and cart. Ideal for house moving industry	PG120HM	4-Way Manifold	9506 9642	Advance Hold Return**	20,8	4,1	4
Double-Acting	Base model 4,1 kW gasoline pump, with 22 liter reservoir, roll cage and double-acting valve.	PG1204	4-Way	9506	Advance Hold Return	20,8	4,1	4
Double-Acting	PG1204, except has roll cage, solenoid valve and 7,6 meter cord.	PG1204S	4-Way Solenoid***	9516	Advance Hold Return	20,8	4,1	4
Double-Acting	PG1200M-4, except for double-acting systems.	PG1200M-4D	4-Way Manifold	9506 9642	Advance Hold Return**	20,8	4,1	4
Double-Acting	Base model 15 kW pump with 76 liter reservoir.	PG4204	4-Way	9506	Advance Hold Return	62,8 *	15	4
Double-Acting	PG4204, except has solenoid operated remote valve.	PG4204S	4-Way Solenoid***	9516	Advance Hold Return	62,8 *	15	4

<sup>\*</sup> Usable oil is calculated with oil fill at recommended level at 57 mm below cover plate.

<sup>\*\*</sup> Control up to 4 cylinders independently.

<sup>\*\*\*</sup> Has 7,6 m remote control cord.



Model Shown:

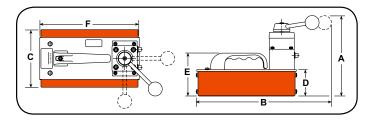
#### **HB443**



#### Features

#### **CONVERTS LOW-PRESSURE PORTABLE HYDRAULIC** PUMPS OR ON-BOARD HYDRAULIC SYSTEMS, INTO HIGH PRESSURE POWER SOURCES.

- Applications include utilities, railroads, construction, riggers and others.
- Operates single or double-acting cylinders, jacks, and tools such as crimper's, spreaders, cable cutters, or tire tools. Version for use with double-acting torque wrenches available.
- May be used to operate two separate, single-acting tools (with integral valves) independently, without need for additional manifold.
- Compact and rugged for use inside a utility vehicle aerial bucket or stowing in a vehicle.
- No reservoir level to maintain; uses low pressure system as oil supply.
- Has 3/8" NPTF ports; compatible with standard fittings for low and high pressure systems.



#### **Technical Dimensions**

Order No.	A	В	С	D	E	F	Output Flow at 700 bar	Prod. Wt. with Oil
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(l/min.)	(kg)
HB44	219	368	156	70	114	267	0,7	7,2

#### **Ordering Information**

For Use With Cylinder Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Input Flow Range (I/min)	Input Flow Pressure (bar)	Output Flow Range (I/min)
Single-Acting	Hydraulic intensifier for single-acting systems	HB443	3-Way 3-Position	9520*	Advance Hold Return	0 - 38	20 - 138	0 - 9,5
Single-Acting/ Double-Acting	Hydraulic intensifier for double-acting systems	HB444	4-Way 3-Position	9506*	Advance Hold Return	0 - 38	20 - 138	0 - 9,5
Double-Acting	Hydraulic intensifier for double-acting torque wrench tools	HB445-RR	4-Way 3-Position	-	Advance Hold Return	0 - 38	20 - 138	0 - 9,5

<sup>†</sup> For maximum efficiency, recommended input flow is 18,9 l.min at a maximum pressure of 140 bar. Higher flows and/or pressures must be compensated for at the system pump (e.g., relief valve, variable flow devices, etc.)

\* Posi-Check® valve design, Posi-Check® guards against pressure loss when valve is shifted from "advance" position to "hold" position.







#### **CAUTION**

This system should not be used for lifting applications.





#### **Torque Wrench Pumps**

For Torque Wrench Pumps, refer to the tool section.







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



#### 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

These motors start under full load and are suitable for operation up to 5000 or 700 bar. The motor is 0,83 kW, 12000 rpm, 115 or 230V (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.

NOTE: Remote control available.

#### 1-1/2 HP 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, 3450 rpm, 115 or 230V, 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 230/460V, 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 HP 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: 2,2 kW, 3450 rpm, 230/460V, 60 or 50 cycle (specify). AC three-phase, with thermal overload switch. Equipped with internal and external relief valve. Will start under load.

# 3 HP AIR MOTOR

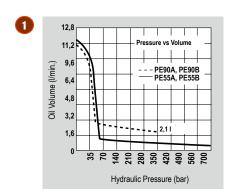
This pump is ideal for use where electricity is unavailable or cannot be used. The 5000 or 700 bar pump has a 2,2 kW air-driven motor at 3000 rpm (optimum performance based on 6 bar air pressure and 50 cfm at the pump). You can drive single or double-acting cylinders with the correct valve. **NOTE**: 6 bar air supply required to start under full load.

# **5** GASOLINE ENGINE

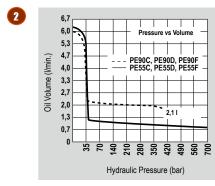
This version is perfect when electricity and air are unavailable. It is capable of continuous operation at full pressure. Consists of basic 700 bar pump, 4-cycle Briggs & Stratton "Diamond Edge" gasoline engine, developing 6 hp. As with all these pumps, this unit can be valved for use with either single or double-acting cylinders.



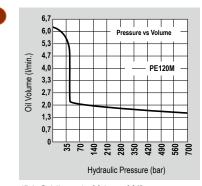
#### Performance Specifications



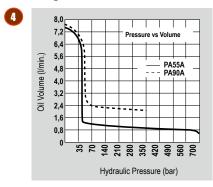
dBA @ Idle and 700 bar - 90/95 dBA @ Idle and 350 bar - 90/95



dBA @ Idle and 700 bar - 80/85



dBA @ Idle and 700 bar - 80/85

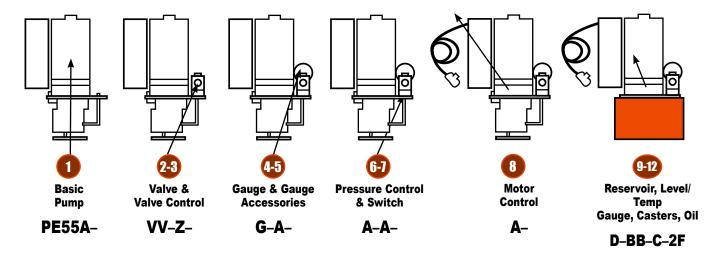


dBA @ Idle and 700 bar - 83/88 dBA @ Idle and 350 bar - 83/88

#### 

#### "Assemble to order" 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 108-109. 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 700 bar two-speed pump with a 115V, 50-60Hz, single-phase, 1,12 kW, 12000 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, 40063OR9 7,6 reservoir, a 350431 oil level/temperature gauge, 10494 casters, and 7,6 I of standard hydraulic oil.

See next two pages for pump components

#### TO BUILD YOUR PUMP, FILL IN KEY LETTERS FROM CHARTS

**ASSEMBLE TO ORDER PUMPS** 

**COMPONENT, SPECIFICATION CHART** 

1 Basic Pump	2 Select Valve	3 Select Valve Control	4 Select Gauge	Select Gauge Accessory	6 Pressure Control
Pressure Switch	8 Motor Control	<b>9</b> Reservoir	Oil Level / Temp. Gauge	11 Choose Casters	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

	BA	SIC PUMP NUMBI	ERS		SPECIFICATIONS			
PE55	PE120	PA55	PA90	PG55	NOTE: Customer must speicify voltage required.			
(700 bar)	(700 bar)	(700 bar)	(5,000 )	(700 bar)	Power Source	rpm	kW	
А					115V-60 Hz, 1Ø	12000	0,84	
					110V-50 Hz, 1Ø	12000	0,84	
В					230V-60 Hz, 1Ø	12000	0,84	
					220V-50 Hz, 1Ø	12000	0,84	
C **					115V-60 Hz, 1Ø	3450	1,12	
C50 **					110V-50 Hz, 1Ø	2850	1,12	
D **					230V-60 Hz, 1Ø	3450	1,12	
D50 **					220V-50 Hz, 1Ø	2850	1,12	
	M60 *				208, 230/460V-60 Hz, 3Ø	3450	2,24	
	M50 *				220/380V-50 Hz, 3Ø	2850	2,24	
		Α	Α		Air Motor	3000	2,24	
				Α	Gas Engine	3600	4,47	

<sup>\*</sup> Voltage Specification Required.

# 2 VALVE

Man	ifold / Manual / Air-Operated Directional Valves	Function
AB	9628 manual, tandem center	4-way, 3-pos.
AC	9632 manual "twin" tandem and open center	valve
Α	None	_
В	9626 manifold	
С	9584 manual	Manifold
D	9582 manual	3-way, 2-pos. valve
Е	9610 automatic, pilot-operated	valvo
G	9504 manual	3/4-way, 2-
IJ	9594 air-operated	pos. valves
L	9502 manual, closed center "non-interflow"	3-way, 3-pos.
M	9520 manual, tandem center Posi-Check®	valve

Man	ifold / Manual / Air-Operated Directional Valves	Function
0	9609 manual, pressure compensated flow control	3-way, 4-pos.
R	9506 manual, tandem center Posi-Check®	
RR	9511 manual, open center	4 2
S	9500 manual, tandem center	4-way, 3-pos.
T	9507 manual, closed center Posi-Check®	vaives
U	9501 manual, closed center	
	Solenoid-Operated Directional Valves	Function
FF	9569 solenoid-operated - 24V	3-way, 2-pos.
НН	9572 solenoid-operated - 24V	3/4-way, 2-pos.
PP	9599 solenoid-operated - 24V	3-way, 3-pos.
VV	0510	4 - 2
	9512 solenoid-operated - 24V	4-way, 3-pos.

# 3 VALVE CONTROL

	Use with Valve	
Α	None	_
Х	304718 remote hand control, 3,1 m	9572
XF	309652 remote foot control, 3,1 m	9572
Υ	202777 remote hand control, 3,1 m	9569 or 9599

	Valve Remote Control	Use with Valve
Z	202778 remote hand control, 3,1 m	9512 or 9615
ZF	309653 remote foot control, 3,1 m	9512, 9615, 9569 or 9599
ZZ	209593 remote hand control, 3,7 m	9594

<sup>\*\*</sup> 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.

# 4 GAUGE

	Pressure Gauge					
Α	None					
В	Other – Specify					
G	9041 0-700 bar - 0-689 Bar (63 mm diameter)					
Н	9040 0-700 bar - 0-689 Bar (Liquid) (63 mm diameter)					
J	9051 0-700 bar - 0-689 Bar (100 mm diameter)					
M	9052 0-700 bar - 0-689 Bar (Liquid) (100 mm diameter)					

# **5** GAUGE ACCESSORY

Gauge Accessories	
Α	None
N	9049 pulsation dampener - All dry gauges

# **6** PRESSURE CONTROL

Pressure Controls		
Α	With standard external pressure regulator	
С	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 700 bar unless otherwise specified.

# PRESSURE SWITCH

Pressure Switch		
Α	None	
В	9625 electric pressure switch (500-700 bar)  NOTE: Pressure switch is factory pre-set at 700 bar unless otherwise specified.	
С	9641 pilot-operated air control valve - Normally closed	
D	9643 pilot-operated air control valve - Normally opened	

# 8 MOTOR CONTROL

Electric Motor Controls		
Α	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.	
В	None	
С	25017 remote motor hand switch, 3,1 m	
D	203225 remote motor hand switch, 3,1 m (heavy-duty)	
Е	10461 remote motor foot switch, 3,1 m	
Air Motor Controls		
AA	Other – specify	
В	None	
Р	27876 hand motor control (for PA55 & PA90 series)	
Q	27877 foot motor control (for PA55 & PA90 series)	

# 9 RESERVOIR

	Reservoir	Capacity
Α	None	-
В	Other - Specify	_
D	40063OR9 - PE55, PE120, PA55 and PA90 series	9,5 I
Е	61165† – PE55, PE120, PA55 and PA90 series	7,6 I
	(Oil temperatures in excess of 65,5° C. may cause permanent failure of the thermoplastic reservoir)	
F	RP22‡ – PE55, PE120, PA55 and PA90 series	9,5 I
Н	61799OR9. Same as D except with drain port	9,5 I
J	RP50 - PE55, PE120, PA55 and PA90 series	19 I
K	40137OR9 - PG55 series	19 I
Р	209124 - PE55, PE120, PA55 and PA90 series	26,5 I
٧	RP100 - PE55, PE120, PA55 and PA90 series	37,91
W	RP101 - PG55 series	37,91

NOTE: Includes cover adapter and misc. accessories when applicable.

- † High density polyethylene.
- ‡ Aluminum.

# 110 OIL LEVEL / TEMP. GAUGE

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

### 111 CASTERS

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

### 12 OIL

	Hydraulic Oil	Capacity
Е	Ship pump without oil	_
F	9637 Standard hydraulic oil	3,8 I
G	9638 Standard hydraulic oil	9,5 I
Q	9639 Flame-Out® hydraulic oil	3,8 I
R	9640 Flame-Out® hydraulic oil	9,5 I
U	9645 Biodegradable hydraulic oil	3,8 I
٧	9646 Biodegradable hydraulic oil	9,5 l

NOTE: Select type of hydraulic oil and specify quantity.