

Model Shown:  
**MCS-PE554-8**

Pumps



► 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 l 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.

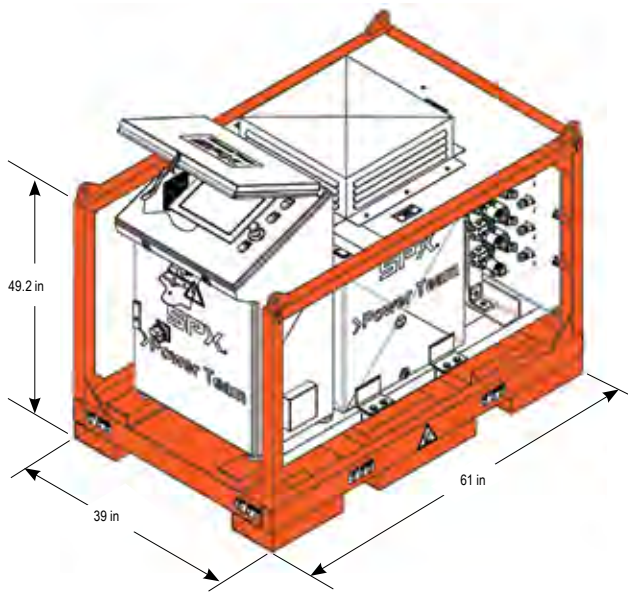


#### Cylinder Selection



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

## Technical Dimensions



## 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



Crate

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



Sensors

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

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



Plug

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

## Ordering Information

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

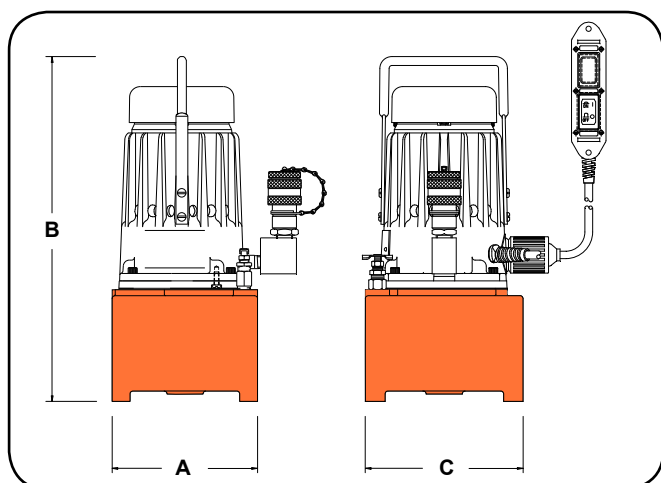


Pumps

### 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 11 amp current draw (115V @ 700 bar)	Remote control with 3,1 m cord

### Ordering Information

Order No.	Overall Dimensions			Oil Delivery		Reservoir		Prod. Wt. With Oil
	A	B	C	7 (bar)	700 (bar)	Oil Cap.	Usable Oil Cap.	
	Width (mm)	Length (mm)	Depth (mm)	(l/min.)	(l/min.)	(l)	(l)	
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

\* 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.

Pumps



### Hydraulic Hoses



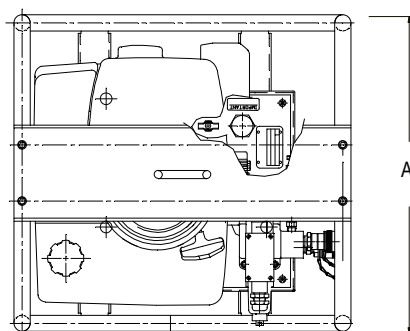
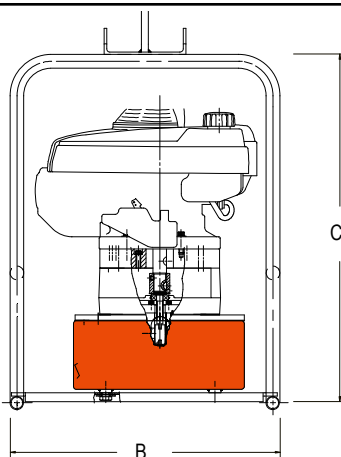
Heavy-duty and thermo plastic hydraulic hoses to meet your requirements and safety factor.

Refer to accessories section for details



### CAUTION

**DESIGNED FOR CRIMPING APPLICATIONS ONLY!**  
This system should not be used for lifting.



### Ordering Information

Order No.	Overall Dimensions			Oil Delivery		Reservoir		Prod. Wt. With Oil (kg)
	A	B	C	7 (bar)	700 (bar)	Oil Cap.	Usable Oil Cap.	
	Width (mm)	Length (mm)	Depth (mm)	(l/min.)	(l/min.)	(l)	(l)	
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

Model Shown:

**PG304, PG554**

Pumps



▶ **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.”

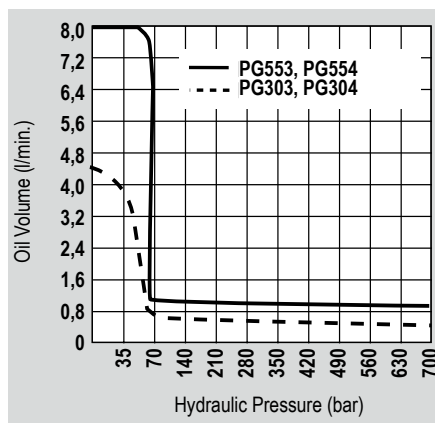
### **PG303 AND PG304 (UP TO 75 TON)**

- 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 l 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.

## ► Performance Specifications







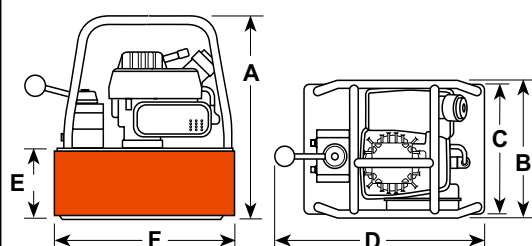
### Hydraulic Hoses



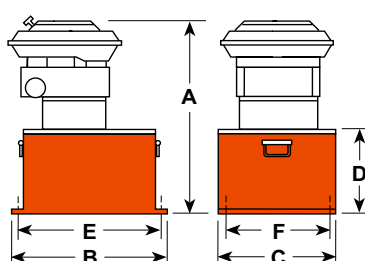
Heavy-duty and thermo plastic hydraulic hoses to meet your requirements and safety factor.

Refer to accessories section for details

**PG303 and PG304**



**PG553 and PG554**



### Technical Dimensions

Order No.	A	B	C	D	E	F	Max. Pressure Output (bar)	rpm	Oil Del. (l/min. @)				Prod. Wt. with Oil (kg)
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			7	70	350	700	
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			(bar)	(bar)	(bar)	(bar)	
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

\* 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. (l)	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

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

Model Shown:

PG4204S, PG1204S, PG1200M-4D

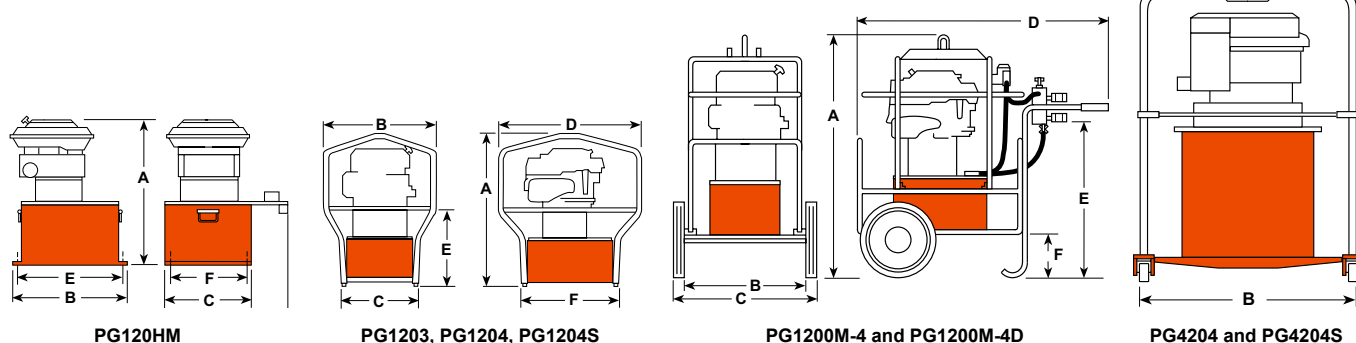
Pumps



## 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 double-acting 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 l of oil per minute at 700 bar.
- A 19 liter reservoir means adequate capacity for multi-cylinder 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.	A	B	C	D	E	F	Max. Pressure Output	rpm	Oil Del. (l/min. @)				Prod. Wt. with Oil (kg)
									7	70	350	700	
									(bar)	(bar)	(bar)	(bar)	
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.

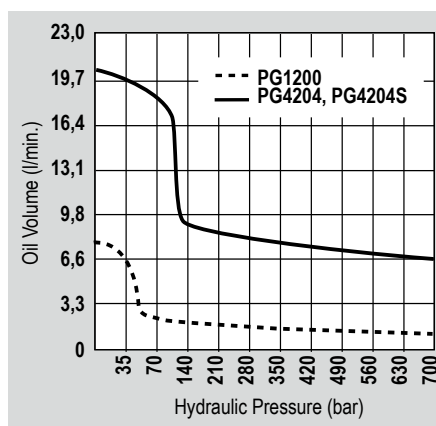
### PG1200M-4D

- 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 l 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. (l)	Horsepower	Cycle
Single-Acting	Base model 4,1 kW gasoline pump with 22 liter reservoir.	<b>PG1203</b>	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.	<b>PG1200M-4</b>	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	<b>PG120HM</b>	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.	<b>PG1204</b>	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.	<b>PG1204S</b>	4-Way Solenoid***	9516	Advance Hold Return	20,8	4,1	4
Double-Acting	PG1200M-4, except for double-acting systems.	<b>PG1200M-4D</b>	4-Way Manifold	9506 9642	Advance Hold Return**	20,8	4,1	4
Double-Acting	Base model 15 kW pump with 76 liter reservoir.	<b>PG4204</b>	4-Way	9506	Advance Hold Return	62,8 *	15	4
Double-Acting	PG4204, except has solenoid operated remote valve.	<b>PG4204S</b>	4-Way Solenoid***	9516	Advance Hold Return	62,8 *	15	4

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

\*\* Control up to 4 cylinders independently.

\*\*\* Has 7,6 m remote control cord.



Model Shown:

HB443

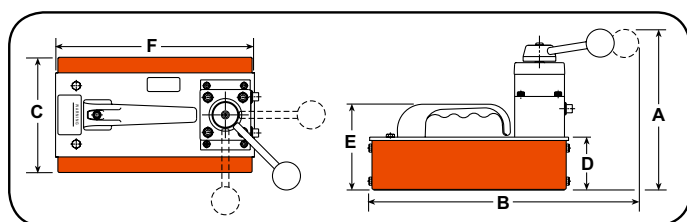
Pumps



### >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	B	C	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 (l/min)	Input Flow Pressure (bar)	Output Flow Range (l/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

† 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.

