

# P-Series, Lightweight Hand Pumps

▼ Shown from top to bottom: P-802, P-842, P-202, P-142



- Lightweight and compact design
- Durable glass-filled nylon reservoir and nylon encapsulated aluminium pump base for maximum corrosion resistance
- Two-speed operation reduces handle strokes by as much as 78% over single speed pumps
- Lower handle effort to minimize operator fatigue
- Integral 4-way valve on P-842 for operation of double-acting cylinders
- Handle lock and lightweight construction for easy carrying
- Large oil capacities to power a wide range of cylinders or tools
- Non-conductive fiberglass handle for improved operator safety
- Internal pressure relief valve for overload protection.

▼ Cylinder-pump set SCR-254H used to support the construction while monitoring pressure and load with the gauge.



Torque and tension specialist



### Cylinder Matching Chart

For help in selecting the correct hand pump for your application, please refer to the Cylinder Matching Chart located in the 'Yellow Pages'.

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### Speed Chart

To determine how a specific pump will operate your cylinder, see the Pump-Cylinder Speed Chart in the 'Yellow Pages'.

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### Tank Kits:

When a return-to-tank port is required, the Tank Kits provide a 7/16" -20 UN port at the rear of the reservoir.

PC-20	Fits P-141, P-142
PC-25	Fits P-202, P-391, P-392



### Power Box

Portable tool box with P-392 hand pump, gauge adaptor assembly, hose and RC-, RCS, RSM- or WR-Series cylinder.

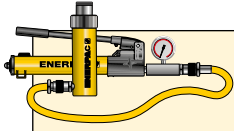
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Pump Type	Usable Oil Capacity (cm <sup>3</sup> )	Model Number	Pressure Rating <sup>2)</sup> (bar)		Oil Displacement per Stroke (cm <sup>3</sup> )		Max. Handle Effort (kg)
			1 <sup>st</sup> stage	2 <sup>nd</sup> stage	1 <sup>st</sup> stage	2 <sup>nd</sup> stage	
Single-Speed	327	P-141	-	700	-	0,90	32,7
	901	P-391	-	700	-	2,47	38,6
Two-Speed	327	P-142 <sup>1)</sup>	13	700	3,62	0,90	35,4
	901	P-202	13	700	3,62	0,90	28,6
	901	P-392 <sup>1)</sup>	13	700	11,26	2,47	42,2
	2540	P-802	27	700	39,33	2,47	43,1
	2540	P-842 <sup>3)</sup>	27	700	39,33	2,47	43,1

<sup>1)</sup> Available as set, see note on next page. P-392 also available in Power Box Set (page 61).

<sup>2)</sup> Contact Enerpac for applications where operating pressure is less than 10% of pressure rating.

<sup>3)</sup> P-842 for use with double-acting cylinders



### Pump-Cylinder Sets

All pumps marked with an \* are available as sets (pump, cylinder, gauge, couplers and hose) for your ordering convenience.

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## P Series



Reservoir Capacity:

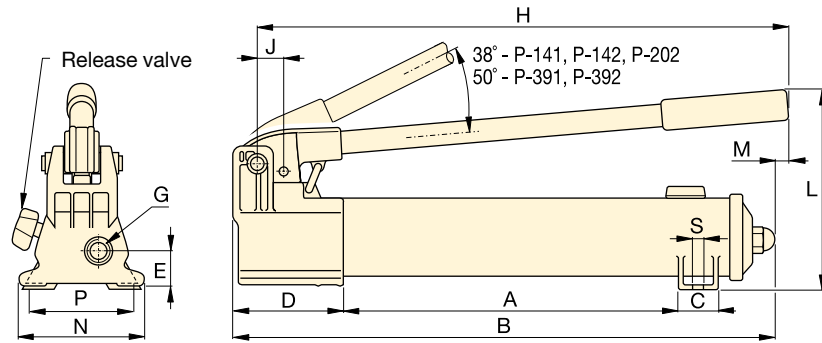
**327 - 2540 cm<sup>3</sup>**

Flow at Rated Pressure:

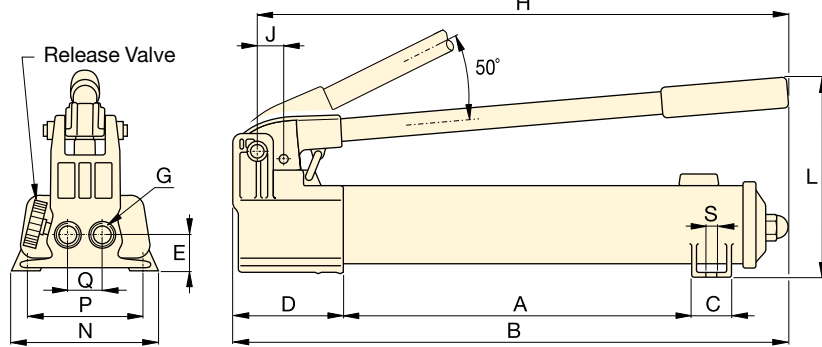
**0,90 - 2,47 cm<sup>3</sup>/stroke**

Operating Pressure:

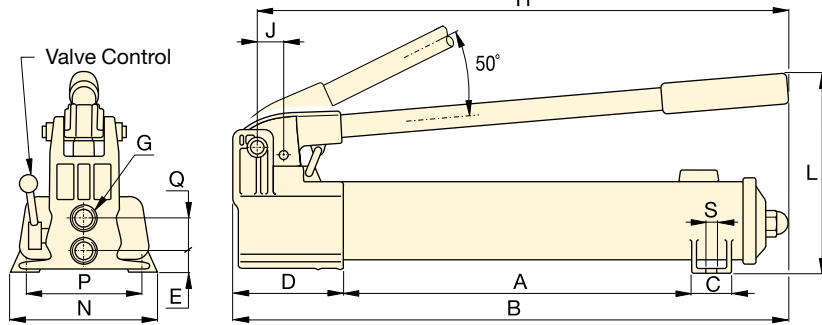
**700 bar**



**P-141, P-142, P-202, P-391, P-392**



**P-802**



**P-842**



### Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.

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### GA45GC Gauge Adaptor

Protect yourself from system overloading by simply ordering one part number for a pre-assembled gauge, adaptor block and coupler.

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### Foot Pump P-392FP

For handsfree operation the lightweight and robust P-392FP Foot Pump is the perfect choice.

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Piston Stroke	Dimensions (mm)															Model Number
	(mm)	A	B	C	D	E	G	H	J	L	M	N	P	Q	S	
12,7	185	336	28	85	28	1/4"-18 NPTF	319	19	143	-	95	80	-	7	2,4	<b>P-141</b>
25,4	344	533	36	99	33	3/8"-18 NPTF	522	30	177	16	120	-	-	-	4,1	<b>P-391</b>
12,7	185	336	28	85	28	1/4"-18 NPTF	319	19	143	-	95	80	-	7	2,4	<b>P-142 <sup>1)</sup></b>
12,7	344	509	36	85	28	1/4"-18 NPTF	400	19	144	16	95	-	-	-	3,4	<b>P-202</b>
25,4	344	533	36	99	33	3/8"-18 NPTF	522	30	177	16	120	-	-	-	4,1	<b>P-392 <sup>1)</sup></b>
25,4	337	552	45	133	35	3/8"-18 NPTF	527	30	228	-	181	153	35	10	8,2	<b>P-802</b>
25,4	337	552	45	133	20	3/8"-18 NPTF	527	30	228	-	181	153	36	10	10,0	<b>P-842 <sup>3)</sup></b>

▼ Shown from left to right: P-77, P-80, P-84, P-801, P-39



- Reduced handle effort and ergonomic grip for less operator fatigue
- Two-speed operation for fast and easy operation (except P-39)
- Vent free reservoir eliminates spills
- Quick grip handle allows for easy transport
- Integral reservoir over-pressurization protection
- All steel construction, chrome plated plunger and wiper system for durable, long lasting performance
- 4-way valving on the P-84 and P-464 for operation of double-acting cylinders.

▼ In the absence of a power supply, the P-80 Hand Pump offers a powerful solution.



## The Solution for Tough Jobs



### Two Speed Pumps

Recommended for applications where cylinder plunger must advance rapidly to load contact, and applications where greater oil capacities are required, such as multiple cylinder hook-ups.



### Foot Pump Conversion Kits

Convert your P-39, P-77, P-80 or P-801 to foot power with the **PC-11** Kit. Includes instructions for easy conversion.



### GA45GC Gauge Adaptor

Protect yourself from system overloading by simply ordering one part number for a pre-assembled gauge, adaptor block and coupler.

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### 4-Way Control Valve

**P-84** and **P-464** feature a manual 4-way control valve, designed for use with one double-acting or two single-acting cylinders. For system set-up information:

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Pump Type	Usable Oil Capacity (cm <sup>3</sup> )	Model Number	Pressure Rating <sup>2)</sup> (bar)		Oil Displacement per Stroke (cm <sup>3</sup> )		Max. Handle Effort (kg)
			1 <sup>st</sup> stage	2 <sup>nd</sup> stage	1 <sup>st</sup> stage	2 <sup>nd</sup> stage	
Single	672	<b>P-39</b>	-	700	-	2,46	39
Two-Speed	672	<b>P-77</b>	34	700	16,39	2,46	40
	2200	<b>P-80</b> <sup>1)</sup>	34	700	16,39	2,46	35
	4100	<b>P-801</b>	34	700	16,39	2,46	35
	2200	<b>P-84</b> <sup>3)</sup>	34	700	16,39	2,46	35
	7423	<b>P-462</b>	14	700	126,20	4,75	49
	7423	<b>P-464</b> <sup>3)</sup>	14	700	126,20	4,75	49

<sup>1)</sup> Available as a set, see note on next page.

<sup>2)</sup> Contact Enerpac for applications where operating pressure is less than 10% of pressure rating.

<sup>3)</sup> P84, P-464 is for use with double-acting cylinders.

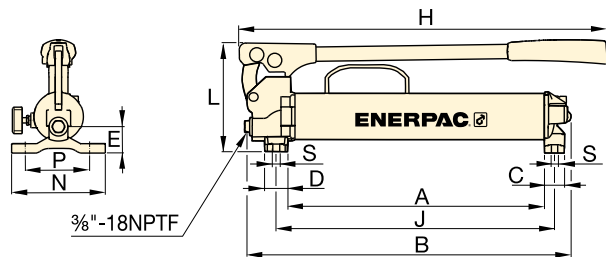
# ULTIMA Steel Hand Pumps



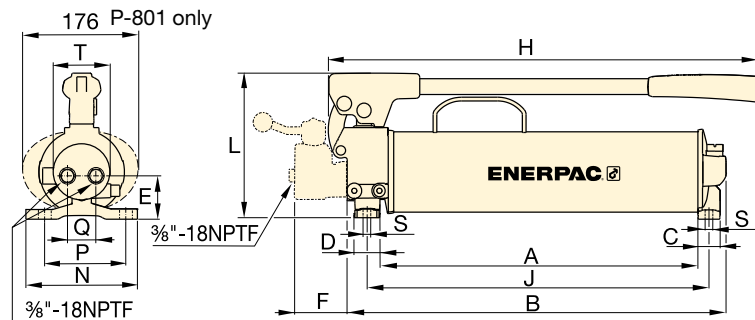
## Speed Chart

To determine how a specific pump will operate your cylinder, see the Pump-Cylinder Speed Chart in the 'Yellow Pages'.

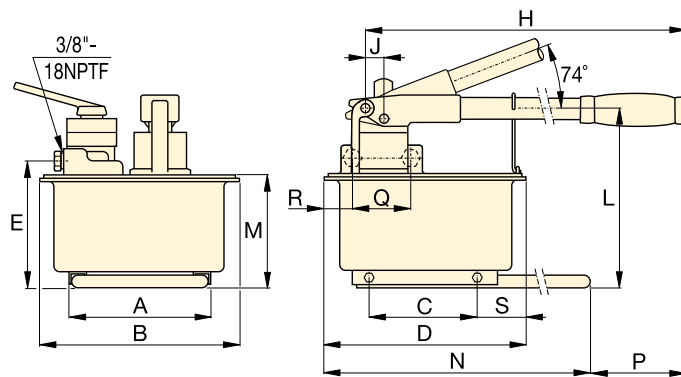
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P-39, P-77



P-80, P-801, P-84



P-462, P-464

## P Series



Reservoir Capacity:  
**672 - 7423 cm<sup>3</sup>**

Flow at Rated Pressure:  
**2,46 - 4,75 cm<sup>3</sup>/stroke**

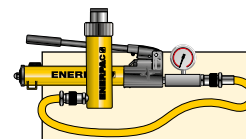
Maximum Operating Pressure:  
**700 bar**



### Extra Capacity Hand Pumps

P-462 and P-464 feature extra large reservoirs and high first-stage flow rate.

These pumps are ideally suited for powering high-capacity cylinders.



### Pump-Cylinder Sets

The P-80 is also available as set (pump, cylinder, gauge, couplers and hose) for your ordering convenience.

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### Cylinder Matching Chart

For help in selecting the correct hand pump for your application, please refer to the Cylinder Matching Chart located in the 'Yellow Pages'.

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Piston Stroke	Dimensions (mm)																Model Number	
	A	B	C	D	E	F	H	J	L	M	N	P	Q	R	S	T		
25,4	383	480	30	35	37	-	550	416	163	-	140	111	-	-	8,4	-	6,2	P-39
25,4	391	487	30	35	47	-	550	424	163	-	140	111	-	-	8,4	-	7,1	P-77
25,4	428	511	30	35	55	-	579	460	195	-	150	121	42	-	8,4	74	10,7	P-80 <sup>1)</sup>
25,4	428	511	30	35	55	-	579	460	195	-	150	121	42	-	8,4	74	14,1	P-801
25,4	428	510	30	35	55	70	579	460	195	-	150	121	38	-	8,4	74	11,8	P-84 <sup>3)</sup>
38,1	210	308	163	320	195	-	671	25	270	175	650	92	-	-	80	-	27,7	P-462
38,1	210	308	163	320	195	-	671	25	270	175	650	92	89	68	80	-	27,7	P-464 <sup>3)</sup>

▼ Shown from left to right: P-25, P-51, P-18



## When Less Than 700 Bar is All You Need



### GA45GC Gauge Adaptor

Protect yourself from system overloading by simply ordering one part number for a pre-assembled gauge, adaptor block and coupler.

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### Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.

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- P-25 and P-50 pump oil in both forward and reverse handle movement improving overall efficiency, ideal when mounting space is restricted
- External load-release valve
- Internal pressure-relief valve for overload protection
- For use with single-acting cylinders and tools.

▼ P-18 hand pump used for locking the rotating table for marble polishing.



Pump Type	Usable Oil Capacity (cm <sup>3</sup> )	Model Number *	Pressure Rating (bar)	Oil Displacement per Stroke (cm <sup>3</sup> )	Max. Handle Effort (kg)
Single-Speed	360	P-18	200	2,46	16
	3277	P-25	175	9,50	27
	3277	P-50	350	4,75	27
	819	P-51	200	4,10	27

\* For use with single-acting cylinders and tools

# Low Pressure Hand Pumps

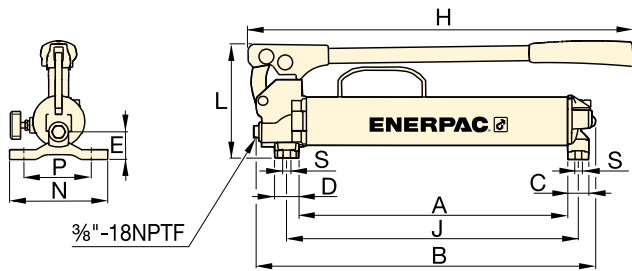
## P Series



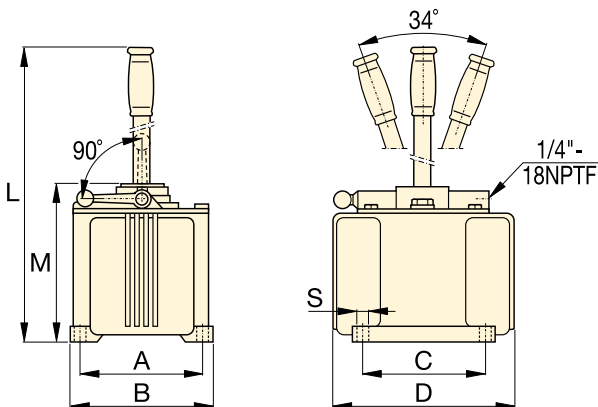
Reservoir Capacity:  
**360 - 3277 cm<sup>3</sup>**

Flow at Rated Pressure:  
**2,46 - 9,50 cm<sup>3</sup>/stroke**

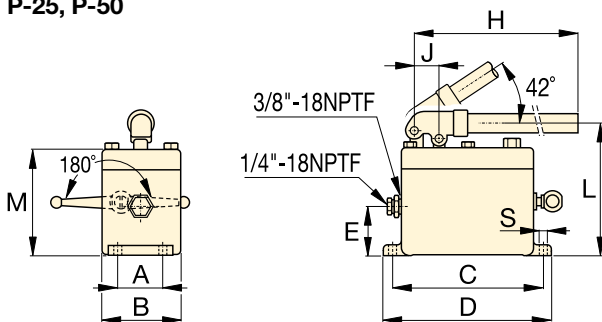
Maximum Operating Pressure:  
**175 - 350 bar**



**P-18**



**P-25, P-50**



**P-51**



### MP-Series Multifluid Hand Pumps

Corrosion resistant hand pumps for low pressure filling and high pressure testing applications, suitable for a wide range of fluids.

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▼ P-51 hand pumps used with RC-series cylinders to keep wooden layers under pressure during lamination of plates.



Piston Stroke	Dimensions (mm)												Model Number *
	(mm)	A	B	C	D	E	H	J	L	M	N	S	
25,4	221	316	30	35	37	385	254	163	–	140	8,4	5,0	<b>P-18</b>
38,1	152	173	152	240	–	–	–	684	200	–	10	16,3	<b>P-25</b>
38,1	152	173	152	240	–	–	–	684	200	–	10	16,8	<b>P-50</b>
25,4	52	92	181	200	57	610	29	160	129	–	9	5,4	<b>P-51</b>

# MP-Series, Multifluid Hand Pumps

▼ Shown: **MP-110**



- Superior corrosion resistance
- Standard Nitrile seals – can be used for a wide range of fluids such as demineralised water, oil/water emulsions, waterglycols, mineral oils
- Two speed pumps up to 1000 bar pressure
- Buna Nitrile seals can be exchanged with optional EPDM seal for use with Skydrol or brake fluids
- Impregnated aluminium anodized pump housing with stainless steel internal pumping components
- Externally adjustable pressure relief valve
- 1/4" NPTF gauge port
- For use with single-acting cylinders and tools.

## MP Series

Flow at Rated Pressure:

**1,6 - 20,6 cm<sup>3</sup>/stroke**

Maximum Operating Pressure:

**110 - 1000 bar**



### Optional Reservoir Kit

Includes 10 litres tank with skid frame, top plate with reservoir seal, suction pipe and mounting bolts.

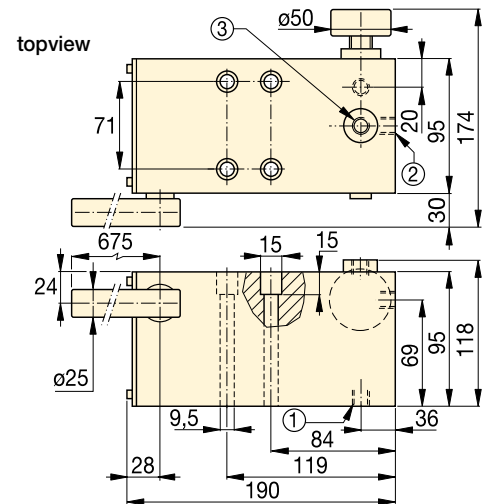
Useable oil capacity is 7,4 litres. Order model number: **MP-10T**.



### Stainless Steel Hand Pump

Also available as stainless steel hand pump, model number **11-400**.

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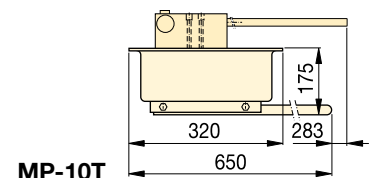
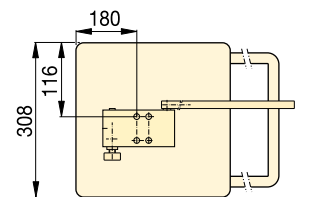
### MP-110, 350, 700, 1000

- ① Suction / Tank return port 3/8"-18 NPTF
- ② Pressure port 3/8"-18 NPTF
- ③ Gauge port 1/4"-18 NPTF

Pump Type	Usable Oil Capacity * (cm <sup>3</sup> )	Model Number **	Pressure Rating (bar)		Oil Displacement per Stroke (cm <sup>3</sup> )		Max. Handle Effort (kg)	Piston Stroke (mm)	Weight (kg)
			1st stage	2nd stage	1st stage	2nd stage			
Two Speed	*	<b>MP-110</b>	35	110	52,6	20,60	45	27,1	6,6
	*	<b>MP-350</b>	35	350	52,6	7,15	45	27,1	6,6
	*	<b>MP-700</b>	35	700	52,6	2,63	45	27,1	6,6
	*	<b>MP-1000</b>	35	1000	52,6	1,60	45	27,1	6,6

\* MP-Pump includes 1,5 mm thick gasket for reservoir mounting. MP-Series pumps requires the use of an external reservoir.

\*\* MP-Series pumps are for use with single-acting cylinders and tools.

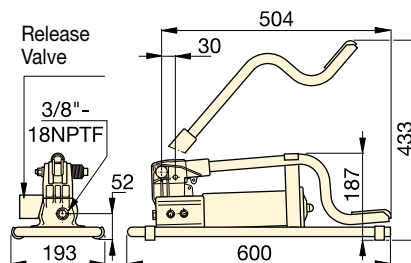


# Lightweight Hydraulic Foot Pump

▼ Shown: P-392FP



- Robust, durable and compact
  - Steel frame for maximum stability
  - Steel pumping handle
  - Aluminium reservoir
- Foot pedal lock and lightweight construction for easy carrying
- Two-speed operation reduces foot pedal strokes
- Large foot-pad release valve for controlling load descent
- Internal pressure relief valve for overload protection.



Usable Oil Capacity (cm <sup>3</sup> )	Model Number	Pressure Rating (bar)		Oil Displacement per Stroke (cm <sup>3</sup> )		Max. Handle Effort (kg)	Piston Stroke (mm)	Piston Stroke (kg)
		1st stage	2nd stage	1st stage	2nd stage			
492	P-392FP *	15	700	11,26	2,47	42	25,4	7,0

\* Available as set, see note on this page.

## P Series



Reservoir Capacity:

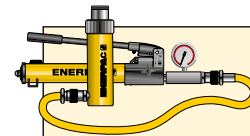
**492 cm<sup>3</sup>**

Flow at Rated Pressure:

**2,47 cm<sup>3</sup>/stroke**

Maximum Operating Pressure:

**700 bar**



### Pump-Cylinder Sets

The P-392FP is available as **set** (pump, cylinder, gauge, couplers and hose) for your ordering convenience.

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### Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.

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▼ P-392FP offers the advantage of hands free operation to handle and control the tool or cylinder.





# Ultra-High Pressure Hand Pumps

▼ Shown from left to right: 11-100, P-2282



- Two-speed operation on the P-2282 allows for faster fill operation, reducing cycle times for many testing applications
- 303 Stainless steel construction on the 11-100 and 11-400 models enable use with many different fluids, such as distilled water, diesters, silicones, soluble oils and petroleum
- Large release knob for improved control of pressure release
- Outlet ports are 3/4"-16 cone for 2800 bar rating
- Ultra-high pressure fittings feature all stainless steel construction except adaptor 41-366 which features nickel plated carbon steel construction.

## Ultra-High Pressure up to 2800 bar



### 2-Way Shut-Off Valve Model Nr. 72-750

For 2800 bar applications requiring a shut-off valve or gauge snubber.

Made of 318 Stainless Steel and utilizing .38 inch cone fittings, it is the perfect selection for use with your ultra-high pressure hand pump.



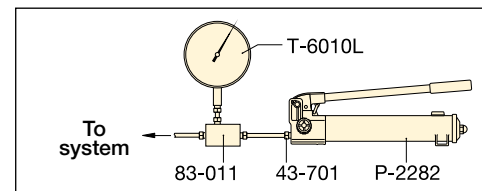
### Test System Gauges

Ideal for monitoring pressure in your hydraulic circuit.

Test System Gauges, such as the **T6010L**, are available

with cone threads or NPTF threads and a variety of pressure ranges.

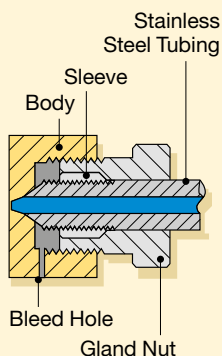
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▲ Typical Test System

### Cone Seal

Stainless Steel High Pressure fittings seal on a 'cone' surface and do not require pipe sealer. The Gland Nut holds the sleeve and tubing tight against the cone surface to provide a 2800 bar seal.



Pump Type	Usable Oil Capacity (cm <sup>3</sup> )	Model Number	Pressure Rating* (bar)		Oil Displacement per Stroke (cm <sup>3</sup> )		Max. Handle Effort (kg)
			1 <sup>st</sup> stage	2 <sup>nd</sup> stage	1 <sup>st</sup> stage	2 <sup>nd</sup> stage	
Two-Speed	983	P-2282	13	2800	16,22	0,61	48,1
Single-Speed	737	11-100	-	700	-	2,49	54,4
	737	11-400	-	2800	-	0,62	54,4

\* Contact Enerpac for applications where operating pressure is less than 10% of operating pressure.

# Ultra-High Pressure Hand Pumps

## ▼ Optional Ultra-High Pressure Fittings and Tubings

Description	Connection	Model Nr.
<b>2800 bar</b>		
Gland Nut Plug	.38" cone	43-001
Elbow	.38" cone	43-200
Tee	.38" cone	43-300
Gauge Tee	.38" cone side/ .25" cone gauge port	43-301
Gauge Adaptor	.38" cone side/ .25" cone gauge port	83-011
Coupling	.38" cone	43-400
Cross	.38" cone	43-600
Gland Nut with Sleeve	.38" cone	43-701
Gauge Connector	.25" cone	43-704
Tubing	100 mm tube, O.D. .38" * 200 mm tube, O.D. .38" * 300 mm tube, O.D. .38" *	45-116 45-126 45-136
<b>700 bar only</b>		
Adaptor	.38" F cone to 1/4" M NPTF	41-146
	.38" F cone to 3/8" M NPTF	41-166
Adaptor	.38" F cone to 1/4" F NPTF	41-246
	.38" F cone to 3/8" F NPTF	41-266
Adaptor	.38" M cone to 3/8" F NPTF	41-366

Note: .25" cone fittings use 9/16"-18 threads, 3/8" cone fittings use 3/4"-16 threads.  
\* Actual tubing lengths are 19 mm less than nominal size shown. These dimensions make distance between centers of valves and fittings multiples of 100 mm spaces.

## P 11 Series



Reservoir Capacity:  
**737 - 983 cm<sup>3</sup>**

Flow at Rated Pressure:  
**0,61 - 2,49 cm<sup>3</sup>/stroke**

Maximum Operating Pressure:  
**700 - 2800 bar**



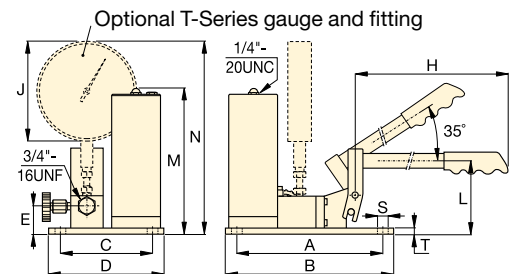
**Ultra-High Pressure pumps DO NOT have an internal safety pressure relief valve.**



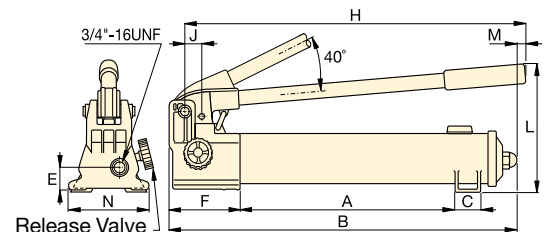
### Stainless Steel Construction

Ultra-high Pressure Fittings feature all stainless steel construction except adaptor 41-366, which features nickel plated carbon steel construction.

11-100  
11-400



P-2282



Piston Stroke	Dimensions (mm)														Model Number
	(mm)	A	B	C	D	E	F	H	J	L	M	N	S	T	
25,4	344	558	35	-	31	133	527	29	228	7	120	-	-	6,4	P-2282
19,8	240	266	151	177	45	-	635	162	114	237	314	7	9	10,0	11-100
19,8	240	266	151	177	45	-	635	162	114	237	314	7	9	10,0	11-400

▼ From left to right: P-142ALSS, P-392ALSS, V-152NV, V-66NV, RC-256NV, RC-106NV, RC-53NV



- Corrosion resistant, nickel-plated valves and cylinders
- Stainless steel pump inserts will not corrode
- Viton® Seals provide heat and chemical resistance
- Anodized aluminum pump reservoirs and plastic encapsulated pump bodies resist wet environments
- Two-speed operation reduces pump handle strokes 78% compared to single-speed pumps
- Pump handles lock for easy carrying.

## RC, P, V Series

Cylinder Capacity:  
**5 - 25 ton**

Stroke:  
**51 - 156 mm**

Maximum Operating Pressure:  
**700 bar**



### Applications



For use in wet environments such as food processing, pulp and paper, mining, construction and applications in high temperature or in welding areas.







### Multifluid Hand Pumps

MP-Series corrosion resistant hand pumps for low pressure filling and high pressure testing applications, suitable for a wide range of fluids.

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	Cylinder Capacity	Stroke	Model Number *	Oil Capacity	Pressure Rating	Collapsed Height	Extended Height	Outside Diameter	
	ton (kN)	(mm)		(cm <sup>3</sup> )	(bar)	(mm)	(mm)	(mm)	(kg)
	5 (45)	76	RC-53NV	50	700	165	241	38	1,5
	10 (101)	51	RC-102NV	78	700	121	175	57	2,3
	10 (101)	156	RC-106NV	225	700	247	403	57	4,4
	25 (232)	156	RC-256NV	528	700	273	431	85	10,0

	Pump Type	Oil Capacity	Model Number *	Pressure Rating	Oil Displacement per Stroke	Port Dimension	Piston Stroke	
		(cm <sup>3</sup> )		(bar)	(cm <sup>3</sup> )	(NPTF)	(mm)	(kg)
	Two Speed	327	P-142ALSS	14 / 700	3,62 / 0,90	1/4"-18	12,7	2,0
		901	P-392ALSS	14 / 700	11,26 / 2,47	3/8"-18	25,4	4,1

	Valve Type	Model Number *	Function	Pressure Rating (bar)	
	Manual Check Valve	V-66NV *	Load holding with cylinders	700	1,8
	Pressure Relief Valve	V-152NV *	Limits system pressure, ± 3% repeatability	55-700	1,6

\* For cylinder details see pages 7-9; for pump details see pages 72-73; for valve details see pages 136-137.