

ENERPAC 

New Hushh Pumps



ENERPAC[®]
INDUSTRIAL TOOLS



Versatile modular Hushh pumps

The rugged modular design of the 700 bar electric and air driven pumps allow easy installation of valves and accessories. To custom build your pump is now virtually plug and play!

Hushh Modular Electric Pumps

▼ Shown from left to right: GPEM-3420W, GPER-5420WFHL



The Standard for Industrial Applications



All models in the chart below are the industries most commonly selected pump configurations. See the Hushh Pump ordering matrix for more options.

Page: 7



GPA-series Modular Air Pumps

If electric power supply is not available the Hushh pumps are also available with an air driven motor.

Page: 12

▼ SELECTION CHART *

BASIC PUMP CONFIGURATIONS Select your hushh pump model here for most applications. For special requirements see the hushh pump ordering matrix. <i>Page: 7</i>	Pump Type	Used with Cylinder		Valve Function			Valve** Model Number	Reservoir Capacity (litres)
GPEW-Series without Valve, without Electric Box • Ideal for matching your valving to your needs, for example in production applications. • For remote valve or valve block, use a BSS1090 high pressure connecting plate		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		10
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		20
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		40
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
GPED-Series with Dump Valve • Ideal for punching, crimping and cutting • For use when load holding is not required • Push-button control pendant with 3 m cord controls the valve and motor.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VSP-324D	10
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VSP-324D	20
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
GPEM-Series with Manual Valve, without Electric Box • Ideal choice for most applications • Manual valve control, for both single-acting or double-acting applications • Manual motor control.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VM-2	10
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VM-3	10
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VM-3L	20
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VM-4	20
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VM-4L	20
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VM-4	40
GPER-Series with Solenoid Valve • Ideal for production and lifting applications • All valves are 3-position for Advance-Hold-Retract • Push-button control pendant with 3 m cord controls the valve.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VSP-324	10
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VSP-424	20
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VSP-424	40
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

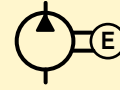
* All models in this chart are 400 VAC, 3 phase at 50 Hz. For other options please refer to the Hushh Pump ordering matrix on page 7.

** See pages 8-11 for technical information of valves.

Hushh Modular Electric Pumps

- Available as two-stage model for reduced cycle times and improved productivity
- Easy to customize with modular standard accessory kits
- 24 VDC solenoid valves and remote pendant controls for safer operation
- 40 micron filtered breather with splash guard
- User adjustable pressure external relief valve
- Easy to read integrated oil level sight glass
- Totally enclosed fan-cooled motors are ideal for outdoor use in many environments
- 70-74 dBA for quiet in-plant applications

GPE Series



Reservoir Capacity:

10 - 20 - 40 litres

Flow at Rated Pressure:

0,55 - 0,82 - 1,64 l/min

Motor Size:

0,75 - 1,10 - 2,20 kW

Maximum Operating Pressure:







700 bar



Single Stage or Two Stage

Choose Single Stage operated pumps, for applications that require constant flow regardless of pressure, such as testing or clamping.

Two Stage operated pumps have an increased output flow (appr. 10x higher) at pressures below 55 bar. This allows fast plunger movement towards the load, for reduced cycle times and increased productivity.

2-Series (0,75 kW) Output Flow Rate at 700 bar: 0,55 l/min				3-Series (1,10 kW) Output Flow Rate at 700 bar: 0,82 l/min				5-Series (2,20 kW) Output Flow Rate at 700 bar: 1,64 l/min			
Single Stage		Two Stage		Single Stage		Two Stage		Single Stage		Two Stage	
Model Number	 (kg)	Model Number	 (kg)	Model Number	 (kg)	Model Number	 (kg)	Model Number	 (kg)	Model Number	 (kg)
GPEW-2010WS	54	-		GPEW-3010WS	57	-		GPEW-5010WS	66	-	
GPEW-2020WS	66	GPEW-2020W	67	GPEW-3020WS	72	GPEW-3020W	73	GPEW-5020WS	74	-	
-		GPEW-2040W	85	-		-		GPEW-5040WS	92	GPEW-5040W	93
-		-		-		-		-		-	
-		-		GPED-3110WS	59	-		GPED-5110WS	75	-	
GPED-2120WS	68	GPED-2120W	69	-		GPED-3120W	68	-		GPED-5120W	84
-		-		-		-		-		-	
GPEM-2210WS	60	-		-		-		-		-	
GPEM-2310WS	62	-		GPEM-3310WS	65	-		-		-	
-		-		GPEM-3620WS	74	GPEM-3620W	75	-		GPEM-5620W	77
GPEM-2420WS	69	GPEM-2420W	70	-		GPEM-3420W	73	-		-	
GPEM-2820WS	71	GPEM-2820W	72	-		GPEM-3820W	75	GPEM-5820WS	76	GPEM-5820W	77
-		GPEM-2440W	90	-		-		-		-	
GPER-2310WS	70	GPER-2310W	71	-		-		GPER-5310WS	76	-	
GPER-2420WS	78	GPER-2420W	82	GPER-3420WS	86	-		-		GPER-5420W	85
-		GPER-2440W	99	-		GPER-3440W	105	-		GPER-5440W	105
-		-		-		-		-		-	
-		-		-		-		-		-	

* All models in this chart are 400 VAC, 3 phase at 50 Hz. For other options please refer to the Hushh Pump ordering matrix on page 7.

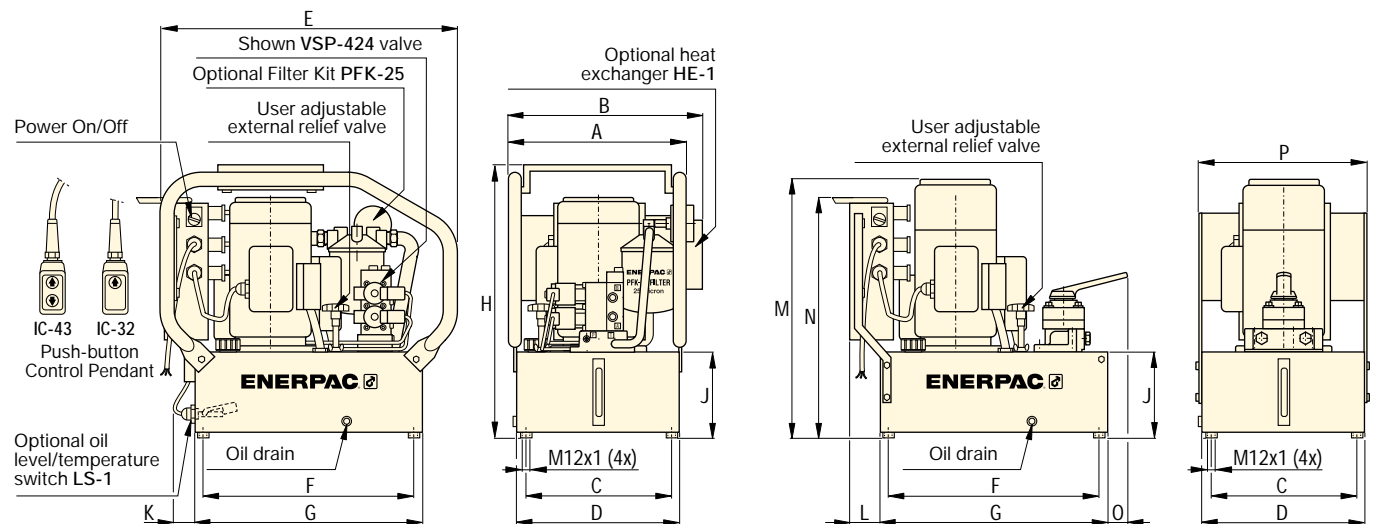
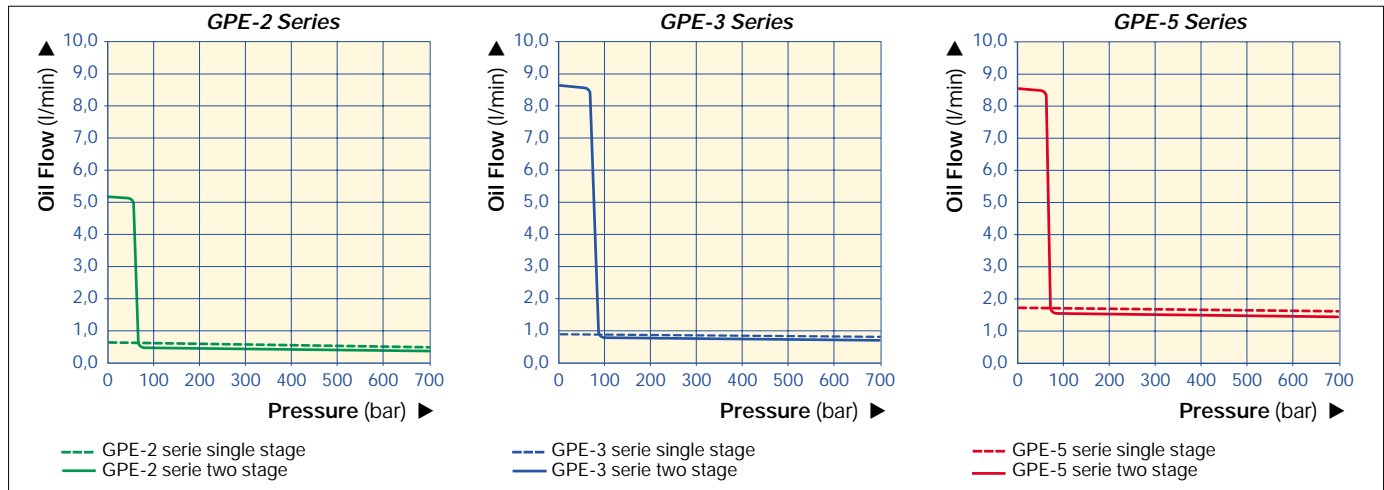
GPE-series, Hushh Modular Electric Pumps

▼ PERFORMANCE CHART

Hushh Pump GPE-Series	Operation	Output Flow Rate (l/min)		Pressure Rating (bar)		Type of Pump		Motor Size		Relief Valve Adjustment Range (bar)	Usable Oil Capacity (litres)	Sound Level (dBA)
		1 st stage	2 nd stage	1 st stage	2 nd stage	1 st stage	2 nd stage	kW	RPM			
		2 (0,75 kW)	Single-stage	–	0,55	–	700	–	3x Rad. pist.			
2 (0,75 kW)	Two-stage	5,10	0,55	55	700	gerotor	3x Rad. pist.	0,75	1390			
3 (1,10 kW)	Single-stage	–	0,82	–	700	–	3x Rad. pist.	1,10	1390	55-700	18,9	72
	3 (1,10 kW)	Two-stage	8,74	0,82	55	700	gerotor	3x Rad. pist.	1,10			
5 (2,20 kW)	Single-stage	–	1,64	–	700	–	3x Rad. pist.	2,20	1390	55-700	37,9	74
	5 (2,20 kW)	Two-stage	8,74	1,64	55	700	gerotor	3x Rad. pist.	2,20			

Output flow rate at 50 Hz.

▼ FLOW CHARTS



GPE-series with Roll Bar

GPE-series without Roll Bar

Reservoir Capacity (litres)	Dimensions GPE series (mm)														
	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
10	257	371	165	223	676	475	506	575	180	60	70	530	455	30	260
20	384	434	312	350	676	475	506	600	180	60	70	570	550	30	390
40	384	434	312	350	676	475	506	725	325	60	70	715	695	30	390

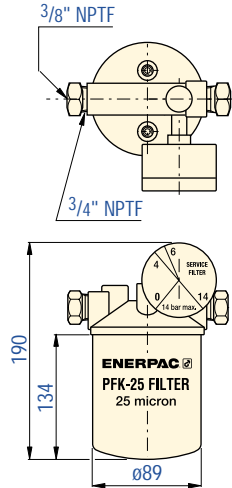
Return Line Filter & Heat Exchanger Kits

▼ PFK-25 mounted on GPE-5420WFHL



Extends life of hydraulic components and increases system reliability

- 25 micron nominal filter cleans oil to increase system life
- Internal by-pass valve to prevent damage if the filter is dirty
- Kit assembles quickly and easily to Enerpac pumps and manifolds
- Replaceable filter element
- Maintenance indicator included
- All installation components included



PFK Series



Filtration:
25 micron

Maximum Operating Pressure:
13,8 bar




Return Line Filter

Removes contaminants from return oil before allowing it back into the reservoir, reducing component damage created by oil borne contaminants.



PF-25 Replacement Filter Element

For best performance, replace filter element regularly.

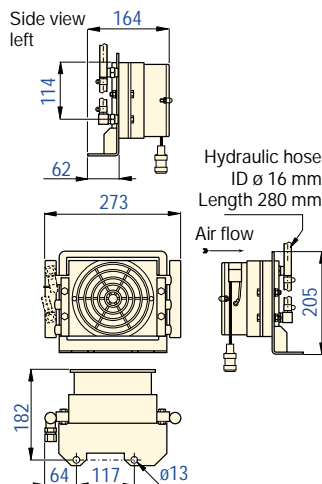
Nominal filtration	Model number	Maximum pressure	Maximum oil flow	By-pass setting	Filter gauge/ service indicator	Replacement filter element	 kg
micron		bar	l/min	bar			
25	PFK-25	13,8	45,4	1,7	yes	PF-25	1,1

▼ HE-1 mounted on GPE-5420WFHL



Extends system life

- Stabilizes oil temperature at a maximum of 54 °C at 21 °C ambient temperature
- Stabilizes oil viscosity, increasing oil life and reduces wear of pump and other hydraulic components
- Kit assembles quickly to Enerpac pump, no special tools required
- Electrical connector factory installed
- All installation components included



HE Series




Heat Transfer:
950 kJ / 900 Btu/h

Maximum Operating Pressure:
20,7 bar

Voltage:
24 VDC



Do not exceed maximum flow and pressure ratings. Heat exchanger is not suitable for water-glycol or high water based fluids.

Voltage	Model number	Thermal transfer *		Amperage draw	Maximum pressure	Maximum oil flow	 kg
		Btu/h	kJoule				
Volt				Amps	bar	l/min	
24	HE-1	900	950	0,26	20,7	26,5	2,9

*At 1,9 l/min at ambient temperature 21 °C.

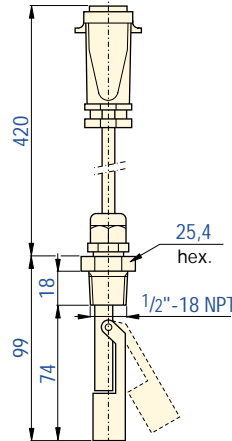
Float/Temperature and Pressure Switch Kits

▼ LS-1 mounted on GPER-5420WFHL



Electronic float switch for feedback on pump oil level

- Shuts down the pump before oil level reaches unsafe level
- Built-in thermal sensing shuts off pump when unsafe operating temperature is reached
- Drop-in design allows for easy installation to pump reservoir
- Plugs directly into pump electrical enclosure



LS Series



Switchpoint:
80 °C

Voltage:
24 V



Float/Temperature Switch

Oil level indicator for pump reservoir. If the pump is mounted in a remote area that does not provide visual access to the external oil level sight, the float switch provides a signal to turn off the pump before internal damage can occur due to cavitation.

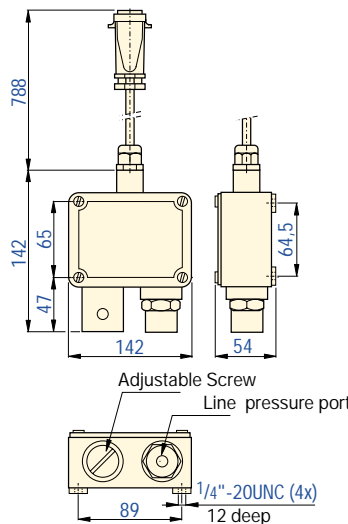
Fixed Temperature Signal °C	Voltage VDC	Model number	Operating temperature °C	Thermostat Rating Amps	Maximum Pressure bar	kg
80	24	LS-1	5 - 110	2,6	10	1,1

▼ Pressure switch IC-7234



Controls your pump, monitors your system

- Accuracy of $\pm 2\%$ of full scale
- High duty cycle
- Mechanical adjustment
- Includes pressure gauge G2536L
- Integrated kit mounts easily to your hydraulic system
- All installation components included



IC Series



Pressure Range:
35 - 700 bar

Accuracy:
 $\pm 2\%$ of full scale



IC-7234 Pressure Switch

Monitors the hydraulic system to determine any change of pressure. The signal can then be used to control the pump, or other peripheral devices.

IC-7234 and electrical harness are specifically designed to work in conjunction with the Enerpac electric pump and manifolds. For other uses, please reference individual pressure switches.

Adjustable Pressure Range bar	Model number	Voltage VDC	Deadband Adjustment bar	Switchpoint Repeatability	Oil ports	kg
35 - 700	IC-7234	24	8,0 - 38,5	$\pm 2\%$	3/8" NPT	1,1

Modular Hushh Pump Ordering Matrix

CUSTOM BUILD YOUR HUSHH PUMP

If the Hushh Pump that would best fit your application cannot be found in the chart on page 3, here you can easily build your custom Hushh pump.

▼ This is how a Hushh Pump Model Number is built up:



1	2	3	4	5	6	7	8
Product Type	Motor Type	Pump Type	Pump Series	Valve Type	Reservoir Capacity	Motor Voltage	Options

1 Product Type

GP = Global Pump

2 Motor Type

E = Electric Motor

3 Pump Type

- D = Dump
- F = Foot Switch
- L = Manual with Electric Box
- M = Manual without Electric Box
- N = No Valve with Electric Box
- R = Solenoid Valve
- V = Electric Valve without Pendant
- W = No Valve without Electric Box

4 Pump Series (Flow rate/Motor Size)

- 2 = 0,55 l/min (0,75 kW)
- 3 = 0,82 l/min (1,10 kW)
- 5 = 1,64 l/min (2,20 kW)

5 Valve Type

- 0 = No valve ¹⁾
- 1 = Dump Valve
- 2 = 3-way, 2-position, manual valve
- 3 = 3-way, 3-position, manual or solenoid valve
- 4 = 4-way, 3-position, manual or solenoid valve
- 6 = 3-way, 3-position, manual locking valve with pilot operated check
- 8 = 4-way, 3-position, manual locking valve with pilot operated check

6 Reservoir Capacity

- 10 = 10 litres
- 20 = 20 litres
- 40 = 40 litres

7 Motor Voltage

- A = 115 V, 1 ph, 50 Hz ⁵⁾
- E = 230 V, 1 ph, 50 Hz ⁵⁾
- K = 440 V, 3 ph, 50 Hz
- T = 230 V, 3 ph, 50 Hz
- W = 400 V, 3 ph, 50 Hz

8 Options (leave blanc if not required)

- blanc = Two stage
- E = EPR Seals
- F = Filter Kit
- H = Heat Exchanger ²⁾
- L = Level/Temperature Switch ²⁾
- N = No Roll Bars ³⁾
- P = Pressure Switch ⁴⁾
- S = Single Stage
- V = Viton Seals

- ¹⁾ For remote valve or valve block, use a BSS-1090 high pressure connecting plate.
- ²⁾ Requires 24VDC source for heat exchanger on pumps without electric box (GPEM and GPEW-models).
- ³⁾ Unless using the "N" suffix all pumps are supplied with roll bars.
- ⁴⁾ Pressure switch option only available on pump models with manual valve and electric box (GPEL).
- ⁵⁾ Not available for the pump serie GPE-5 serie (2,20 kW).

Ordering Example 1

Model Nr: GPEM-3310WS

Is a 1,1 kW, 700 bar, single stage pump, oil flow 0,82 l/min at 700 bar, with a 3-way, 3-position manual valve VM-3, without an electric box, with a 10 litres reservoir, roll bar and 400V, 3 ph electric motor.

Ordering Example 2

Model Nr: GPER-5420WFHL

Is a 2,2 kW, two stage pump, oil flow 1,64 l/min at 700 bar, with 4-way, 3-pos. solenoid valve VSP-424 with pendant IC-43, 20 litres reservoir, roll bar, 400V, 3 ph, electric motor, filter kit PFK-25, heat exchanger HE-1 and float/temperature switch LS-1

GPE Series



Reservoir Capacity:

10, 20 and 40 litres

Flow at Rated Pressure:

0,55 - 0,82 - 1,64 l/min

Motor Size:

0,75 - 1,10 - 2,20 kW

Maximum Operating Pressure:

700 bar



Viton and EPR Seals

Enerpac pumps and components are shipped with Polyurethane and Buna N seals for most sealing requirements. These seal compounds offer the best performance and durability for most applications.

For applications that require specialized seals, Enerpac does make available Viton and EPR seals as options for certain pumps. The use of these seals may reduce life between seal changes, but may be the only solution to the application.

Viton: Sometimes required for seal computability issues, such as with most glycols, but most commonly recommended for high temperature applications.

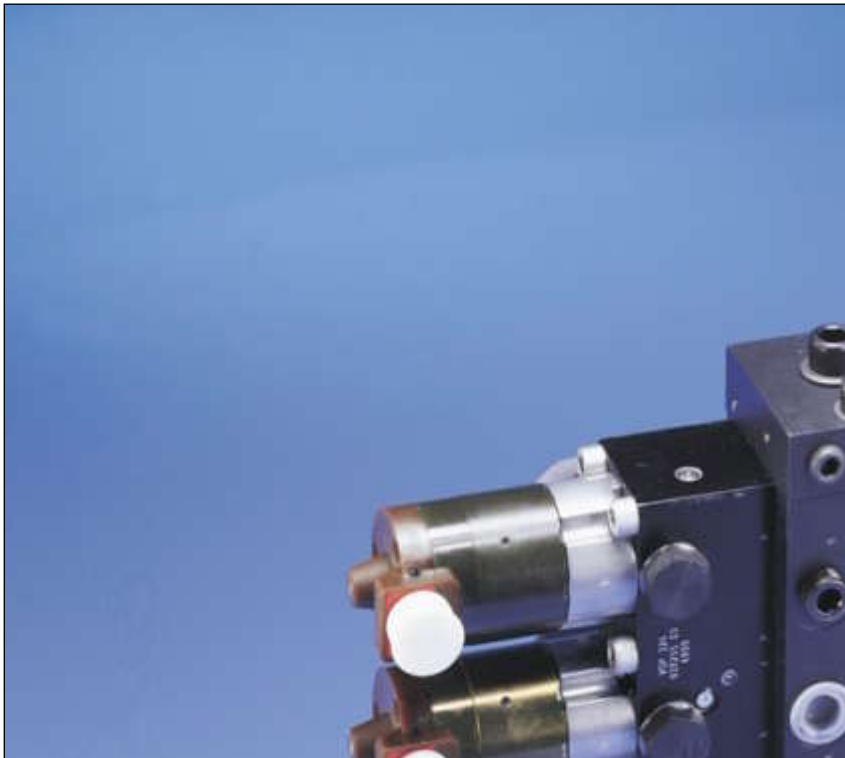
EPR: Generally required for use with fire-resistant fluids such as phosphate esters. When used, they must *not* be exposed to mineral-base fluids!

▼ GPER-5420WFHL Hushh pump as described in ordering example 2.



3-Way Directional Control Valves

▼ Shown from left to right: VM-3, VSP-324, VM-3L, VSPR-324, VM-2, VC-15



- 3-way, 3-position valves provide advance/hold/retract operation for use with single-acting cylinders
- Manual or solenoid operation
- Remote or pump mounting on most Enerpac pumps
- Return line kit VRL-10 included with remote valves
- Available 'locking' option on VC and VM Series valves for load-holding applications
- Standard 'locking' feature on VSP Series valves
- VSP Series solenoid valves are easily converted to a "dump" style valve by simply changing the IC Pendant

▼ A typical multi-cylinder control set-up using V, VC and VM Series Valves.



For Reliable Control of Single-Acting Cylinders



Push-Button Control Station

The push-button control station with 3 m control cord is included with remote mount valves (VSPR). Pump mounted valves (VSP) are controlled through the pump's switchbox using the supplied push button control station.

Solenoid Valve Model number	Control station included
VSPR-324	IC-43
VSPR-324D	IC-32

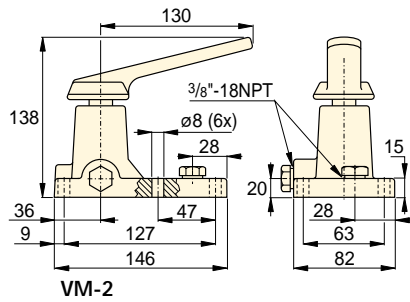
Valve Operation	Valve Location	Valve Type
Manual	Pump Mounted	2-position
Manual	Pump Mounted	3-position, Tandem Center
Manual	Remote Mounted	3-position, Tandem Center
Manual	Pump Mounted	3-pos., Tandem Center, Locking ¹⁾
Manual	Remote Mounted	3-pos., Tandem Center, Locking ¹⁾
Manual	Remote Mounted	3-position, Closed Center
Manual	Remote Mounted	3-position, Closed Center, Locking ¹⁾
Solenoid 24 VDC	Remote Mounted	3-position, Tandem Center ²⁾
Solenoid 24 VDC	Pump Mounted	3-position, Tandem Center ²⁾
Solenoid 24 VDC	Remote Mounted	2-position, Dump
Solenoid 24 VDC	Pump Mounted	2-position, Dump

¹⁾ with pilot-operated check valve.

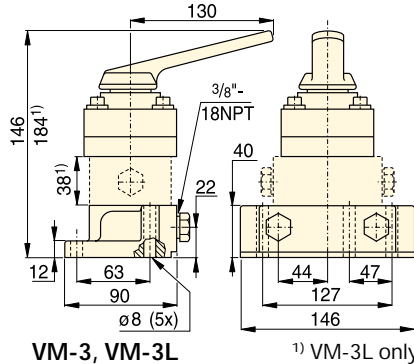
²⁾ with integrated check valve.

3-Way Directional Control Valves

Valve dimensions in mm

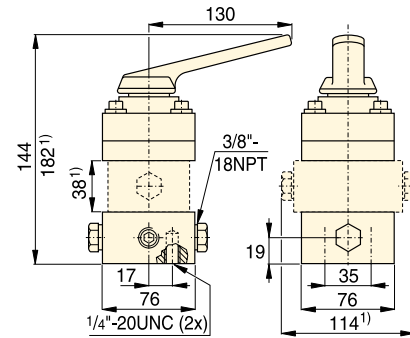


VM-2



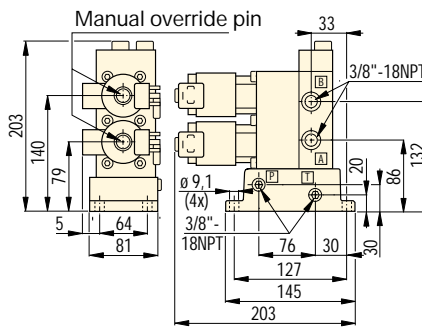
VM-3, VM-3L

¹⁾ VM-3L only



VC-3, VC-3L, VC-15, VC-15L

¹⁾ VC-3L and VC-15L only



VSP-324(D), VSPR-324(D)

**VC/VM
VSP
Series**



Flow Capacity:
17 l/min

Maximum Operating Pressure:
700 bar

Model Number	Hydraulic Symbol	Schematic Flowpath			Weight (kg)
		Advance	Hold	Retract	
VM-2					2,2
VM-3					2,1
VC-3					2,9
VM-3L					3,9
VC-3L					4,7
VC-15					2,9
VC-15L					4,7
VSPR-324					10,8
VSP-324					10,7
VSPR-324D					10,8
VSP-324D					10,7



Converting from VSP-dump into a 3-way, 3-position valve

The single button pendant **IC-32** changes any 3-way VSP-valve into a dump valve. By changing from **IC-32** to an **IC-43** you convert a VSP-dump into a 3-way, 3-position valve.



Conversion Kit VSPCK-24

For use when replacing a BVS-3 valve with a VSP-324 valve. This is necessary because it allows for a pendant connection from the electric box to the valve.



Locking Valves

For applications that require positive load holding, most VC and VM Series valves are available with a pilot-operated check valve. This option provides hydraulic locking of the load until the valve is shifted into the retract position. To order this feature, place an "L" at the end of the model number.

4-Way Directional Control Valves

▼ Shown from left to right: VC-4L, VSP-424, VM-4, VSPR-424, VC-20L, VM-4L



- 4-way, 3-position valves provide advance/hold/retract operation for use with double-acting or two single-acting cylinders
- Manual or solenoid operation
- Remote or pump mounting on most Enerpac electric pumps
- Return line kit VRL-10 included with remote valves
- Available 'locking' option on VC and VM Series valves for load-holding applications
- Standard 'locking' feature on VSP Series valves

▼ A 4-Way directional control valve together with a pressure relief valve are used here to control a double-acting cylinder.



For Double-Acting Cylinder Control



Push-Button Control Station

The push-button control station with 3 m control cord is included with remote mount valves (VSPR). Pump

mounted valves (VSP) are controlled thru the pump's switchbox using the supplied push button control station.

Solenoid Valve Model number	Control station included
VSPR-424	IC-43

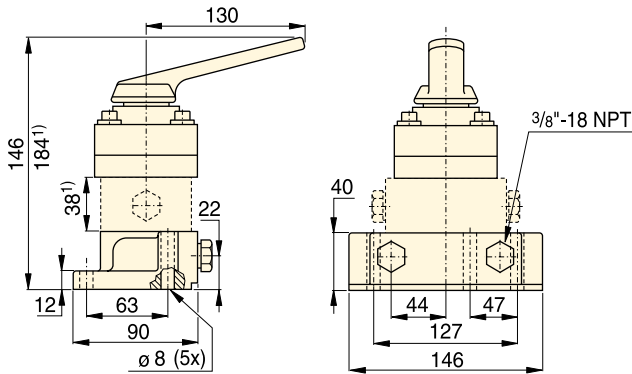
Valve Operation	Valve Location	Valve Type	
Manual	Pump Mounted	3-position, Tandem Center	
Manual	Remote Mounted	3-position, Tandem Center	
Manual	Pump Mounted	3-pos., Tandem Center, Locking ¹⁾	
Manual	Remote Mounted	3-pos., Tandem Center, Locking ¹⁾	
Manual	Remote Mounted	3-position, Closed Center	
Manual	Remote Mounted	3-position, Closed Center, Locking ¹⁾	
Solenoid 24 VDC	Remote Mounted	3-position, Tandem Center ²⁾	
Solenoid 24 VDC	Pump Mounted	3-position, Tandem Center ²⁾	

¹⁾ with pilot-operated check valves.

²⁾ with integrated check valves.

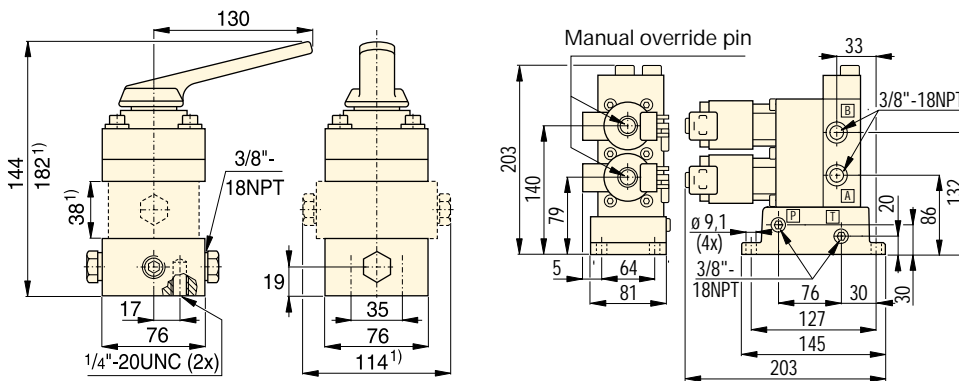
4-Way Directional Control Valves

Valve dimensions in millimetres.



VM-4, VM-4L

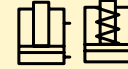
¹⁾ VM-4L only



VC-4, VC-4L, VC-20, VC-20L
¹⁾ VC-4L and VC-20L only

VSP-424, VSPR-424

VC/MM VSP Series



Flow Capacity:
17 l/min

Maximum Operating Pressure:
700 bar

Model Number	Hydraulic Symbol	Schematic Flowpath			Weight (kg)
		Advance	Hold	Retract	
VM-4					2,1
VC-4					2,9
VM-4L					3,9
VC-4L					4,7
VC-20					2,9
VC-20L					4,7
VSPR-424					10,8
VSP-424					10,6



Conversion Kit VSPCK-24

For use when replacing a BVS-4 valve with a VSP-424 valve. This is necessary because it allows for a pendant connection from the electric box to the valve.



Locking Valves

For applications that require positive load holding, most VC and VM Series valves are available with a pilot-operated check valve. This option provides hydraulic locking of the load until the valve is shifted into the retract position. To order this feature, place an "L" at the end of the model number.

▼ GPAM-2410



Power Large Hydraulic Jobs with Compressed Air

- Available as two-stage model for reduced cycle times and improved productivity
- User adjustable pressure external relief valve
- Including large muffler avoids freezing of exhaust line and reduces sound level to 74 dBA
- 40 micron filtered breather with splash guard
- Easy to read integrated oil level sight glass
- 70-74 dBA for quiet in-plant applications



PFK-25 Return Line Filter
Removes contaminants from return oil before allowing it back into the reservoir, reducing component damage created by oil borne contaminants.

Page: 5



RFL-102 Regulator-Filter-Lubricator
Recommended for use with all air pumps. Provides clean, lubricated air and allows for air pressure adjustment. Steel bowl guards are standard.

▼ SELECTION CHART

BASIC PUMP CONFIGURATIONS Select your pump model here for most applications. For special requirements see the hushh air pump ordering matrix. <i>Page: 7</i>	Used with Cylinder		Valve Function			Valve* Model Number	Reservoir Capacity (litres)
GPAW-Series without Valve • Ideal for matching your valving to your needs, for example in production applications. • For remote valve or valve block, use a BSS1090 high pressure connecting plate						-	10
						-	20
						-	40
GPAM-Series with Manual Valve • Ideal choice for most applications • Manual valve control, for both single-acting or double-acting applications	•		•		•	VM-2	10
	•		•	•	•	VM-3	10
	•		•	•	•	VM-3L	20
	•	•	•	•	•	VM-4	10
	•	•	•	•	•	VM-4L	40

* See pages 8-11 for technical information of valves.

Modular Air/Hydraulic Hushh Pumps

CUSTOM BUILD YOUR AIR HYDRAULIC PUMP

If the Air Hydraulic pump that would best fit your application cannot be found in the charts, here you can easily build your custom pump.

▼ This is how an Air Hydraulic Pump model number is built up:



1 Product Type	2 Motor Type	3 Pump Type	4 Pump Series	5 Valve Type	6 Reservoir Capacity	7 Options
--------------------------	------------------------	-----------------------	-------------------------	------------------------	--------------------------------	---------------------

1 Product Type

GP = Global Pump

2 Motor Type

A = Air Motor

3 Pump Type

M = With Manual Valve

W = Without Valve

4 Pump Series (Flow rate)

2 = 0,72 l/min

3 = 1,05 l/min

5 Valve Type

0 = No valve ¹⁾

2 = 3-way, 2-position, manual valve

3 = 3-way, 3-position, manual

4 = 4-way, 3-position, manual valve

6 = 3-way, 3-position, manual locking valve with pilot operated check

8 = 4-way, 3-position, manual locking valve with pilot operated check

6 Reservoir Capacity

10 = 10 litres

20 = 20 litres

40 = 40 litres

7 Options

(leave blanc if not required)

blanc = Two stage

E = EPR Seals

F = Return Filter Kit

N = No Roll Bars ²⁾

S = Single Stage

V = Viton Seals

Ordering Example

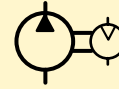
Example: GPAM-2410FS

The GPAM-2410FS is an air operated, single stage hydraulic pump, flow 0,72 l/min at 700 bar, with a 4-way, 3-position manual valve, a 10 litres reservoir, with rollbar and return filter.

¹⁾ For remote valve or valve block, use a BSS-1090 high pressure connecting plate.

²⁾ Unless using the "N" suffix all pumps are supplied with roll bars.

GPA Series



Reservoir Capacity:

10 - 20 - 40 litres

Flow at Rated Pressure:

0,72 - 1,05 l/min

Air Consumption:

3900 l/min

Motor Size:

3,0 kW

Maximum Operating Pressure:

700 bar

2-Series (3,0 kW) Flow Rate at 700 bar: 0,72 l/min				3-Series (3,0 kW) Flow Rate at 700 bar: 1,05 l/min			
Single Stage		Two Stage		Single Stage		Two Stage	
Model Number	(kg)	Model Number	(kg)	Model Number	(kg)	Model Number	(kg)
GPAW-2010S	50	GPAW-2010	51	GPAW-3010S	53	GPAW-3010	54
GPAW-2020S	62	GPAW-2020	63	GPAW-3020S	65	GPAW-3020	66
GPAW-2040S	90	GPAW-2040	91	GPAW-3040S	93	GPAW-3040	94
GPAM-2210S	52	-	-	GPAM-3210S	54	-	-
GPAM-2310S	55	GPAM-2310	56	GPAM-3310S	57	GPAM-3310	58
GPAM-2620S	68	GPAM-2620	69	GPAM-3620S	70	GPAM-3620	71
-	-	GPAM-2410	58	GPAM-3410S	60	GPAM-3410	61
-	-	GPAM-2640	95	-	-	GPAM-3640	97



Single Stage or Two Stage

Choose Single Stage operated pumps, for applications that require constant flow regardless of pressure, such as testing or clamping.

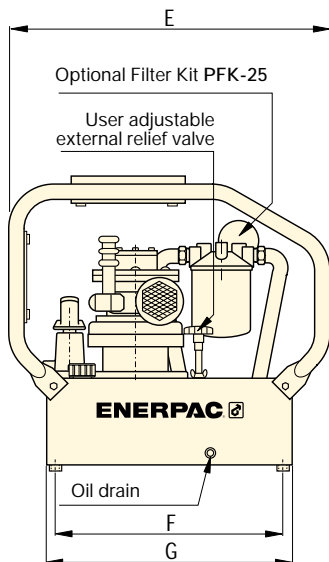
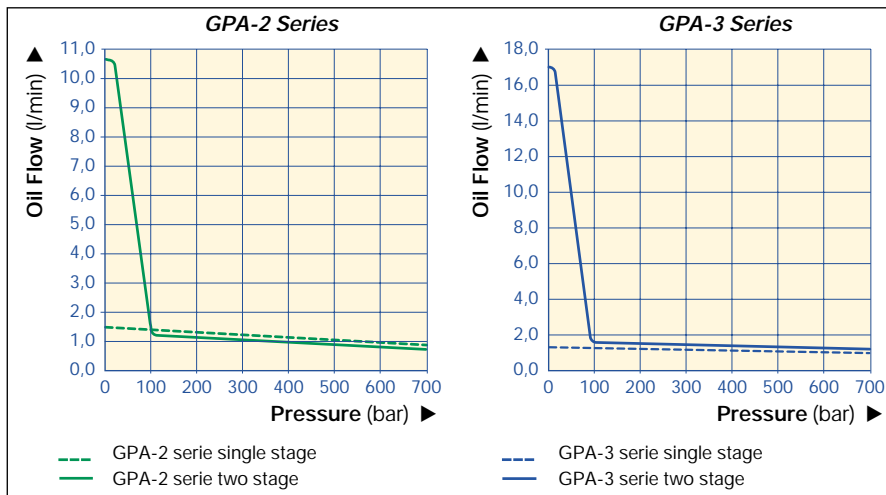
Two Stage operated pumps have an increased output flow (appr. 10x higher) at pressures below 55 bar. This allows fast plunger movement towards the load, for reduced cycle times and increased productivity.

GPA-Series, Modular Air/Hydraulic Pumps

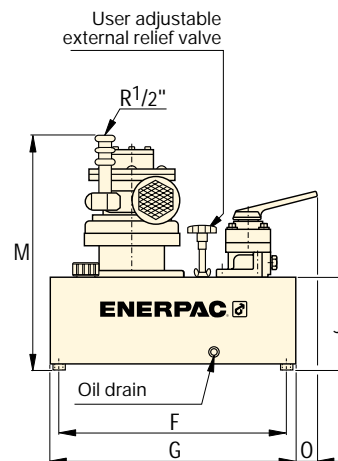
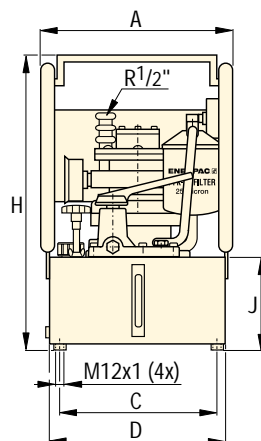
▼ PERFORMANCE CHART

Hushh Pump GPA-Series	Operation	Output Flow Rate (l/min)		Pressure Rating (bar)		Type of Pump		Motor Size		Air Consumption (l/min)	Relief Valve Adjustment Range (bar)	Sound Level (dBA)
		1 st stage	2 nd stage	1 st stage	2 nd stage	1 st stage	2 nd stage	kW	RPM			
2 (3,0 kW)	Single-stage	-	-	-	700	-	3x Rad. pist.	3,0	3000	3900	55-700	74
	Two-stage	10,84	0,72	55	700	gerotor	3x Rad. pist.	3,0	3000			
3 (3,0 kW)	Single-stage	-	-	-	700	-	3x Rad. pist.	3,0	3000	3900	55-700	74
	Two-stage	10,84	0,72	55	700	gerotor	3x Rad. pist.	3,0	3000			

▼ FLOW CHARTS



GPA-Series with Roll Bar



GPA-Series without Roll Bar

Reservoir Capacity (litres)	Usable Oil Capacity (litres)	Dimensions GPA-Series (mm)									
		A	C	D	E	F	G	H	J	M	O
10	9,5	257	165	223	676	475	506	575	180	480	30
20	18,9	384	312	350	676	475	506	600	180	480	30
40	37,9	384	312	350	676	475	506	725	325	625	30



About Enerpac

Enerpac manufactures high-force hydraulics (cylinders, pumps, valves, presses, pullers, tools, accessories and system components) for industry and construction and provides hydraulic workholding and OEM solutions to industry worldwide.

With an 80-year history of quality and innovation, the broadest line in the business, and more than 4,000 distributors and factory-trained service centers around the world, Enerpac leads the industry by setting new standards in design, strength, durability and local support. Strict quality programs, zero tolerance for defects, and ISO-9001 certification are your assurance of safe, trouble-free operation.

Enerpac is ready to tackle your toughest challenge and provide the hydraulic advantage you need to increase productivity, labor efficiency and speed of operation.

Ordering Products and Catalogs

To find the name of the closest Enerpac distributor or service center, to request literature or technical application assistance, contact Enerpac at one of the addresses on the back of this catalog or pose your question through E-mail:

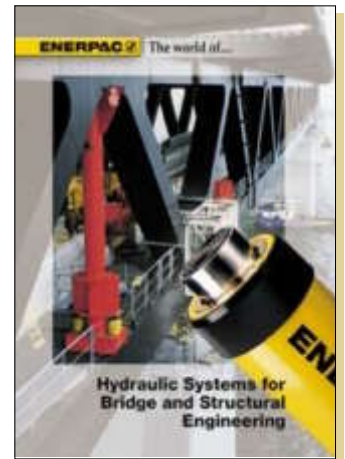
info@enerpac.com

www.enerpac.com for Latest Enerpac information

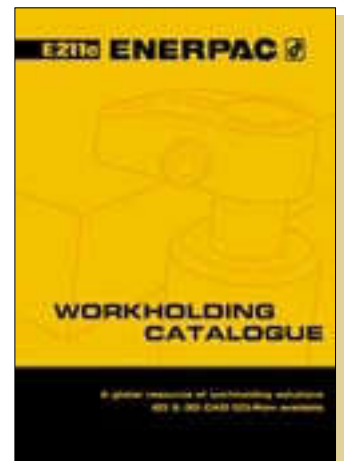
Visit the Enerpac Web Site and find out about:

- Promotions
- New products
- Electronic Catalogs
- Trade shows
- Manuals
- Nearest Distributors & Service Centers
- Enerpac products in action

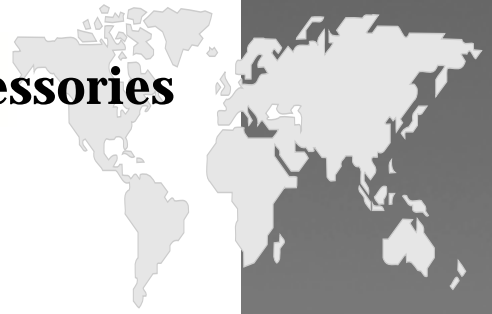
New: High pressure hydraulic systems in structural engineering
The brochure shows a multitude of applications of Enerpac 700 bar hydraulics in Bridge and Structural Engineering projects around the world. Clearly describing the system-technology and tools used in these projects. To obtain your copy just give us a call, or visit our Internet site www.enerpac.com



New: Workholding catalog primarily providing solutions for the machining and machine tool industry and for workpiece holding applications in many other industries.



Modular Hushh Pumps and Accessories



ENERPAC

The Industrial Tools line

Cylinders

- General purpose
- Pancake
- Low height
- Heavy duty
- Hollow plunger
- Industrial
- Pull
- Lock nut
- Stage and Strand Lift
- Synchronous Lift
- Jacks
- Spread

Pumps

- Manual
- Electric driven
- Compressed air driven
- Petrol driven
- Battery powered
- Torque Wrench pumps

Tools

- Maintenance sets
- Manual Pullers
- Multi purpose puller sets
- Posi Lock pullers
- Torque wrenches
- Nut cutters
- Cutters
- Presses
- Load cells
- Tension meters
- Flange spreaders
- Alignment Tools
- Pipe benders

Valves and accessories

- Hoses and couplers
- Gauges
- Valves
- Fittings
- Manifolds

Enerpac Worldwide Locations

Australia

Tel: +61 297 438 988
Fax: +61 297 438 648

Canada

Tel: +1 905 564 5749
Fax: +1 905 564 0305

Toll Free:

Tel: +1 800 268 4987
Fax: +1 800 461 2456

China

Tel: +86 21 5866 9099
Fax: +86 21 5866 7156

France, Turkey, Greece, Africa, Middle East

Tel: +33 1 601 368 68
Fax: +33 1 692 037 50

Germany, Switzerland, Austria, Eastern Europe

Tel: +49 211 471 490
Fax: +49 211 471 49 28

Hong Kong

Tel: +852-2561 6295
Fax: +852-2561 6772

India

Tel: +91 22 769 47 78
Fax: +91 22 769 84 73

Italy

Tel: +39 2 486 111 00
Fax: +39 2 486 012 88

Japan

Tel: +81-048-430-2311
Fax: +81-048-430-1117

Mexico

Tel: +52 771 337 00
Fax: +52 771 838 00

The Netherlands, Belgium, Luxembourg, Sweden, Denmark, Norway, Finland, United Kingdom, Ireland

Tel: +31 318 535 911
Fax: +31 318 525 613
+31 318 535 848

UK, Ireland

Tel: +44 01527 598 900
Fax: +44 01527 585 500

Singapore

Tel: +65 484 5108
Fax: +65 484 5669

South Korea

Tel: +82 32 675 08 36
Fax: +82 32 675 30 02/73

Spain, Portugal

Tel: +34 91 661 11 25
Fax: +34 91 661 47 89

USA, Latin America and Caribbean

Tel: +1 262 781 6600
Fax: +1 262 781 1049

User inquiries:

Tel: +1 800 433 2766
Distributor inquiries/orders:
Tel: +1 800 558 0530

Ref:April-24-2001E



The Full Enerpac Workholding Line

Ask for your free copy of the Enerpac Workholding catalog for information about solutions to your workholding needs. The catalog contains our full line of cylinders, clamps, pumps, valves and accessories, plus a CD-ROM filled with our 2D and 3D CAD files.



The Enerpac Industrial Tools Catalog

A complete range of quality high force tools for all industrial applications, with local availability and after-sales service anywhere in the world. This is what has made Enerpac the recognized global market leader in it's field.



e-mail: info@enerpac.com
Internet: www.enerpac.com

Your Enerpac Distributor: