

Air Driven Hydraulic Pumps

The breakthrough in hydraulic pump technology and ergonomics.
10,000 psi pumps with XVARI® Technology, exclusively from Enerpac!



XVARI[®]
TECHNOLOGY

- *Ergonomic design for less operator fatigue*
- *Variable oil flow and fine metering for precise control*
- *Higher oil flow for increased productivity*



Hydraulic pump technology is undergoing a definitive change

Tremendously high oil delivery, precise control and ergonomic operation; three characteristics of the new XVARI[®] Technology pump developed by Enerpac. Never before have these three vital product characteristics been combined in one hydraulic pump. With XVARI[®] Technology, Enerpac has again set a new industrial standard for succeeding the 50-year old technology of current air-over-hydraulic foot pumps.

The XVARI[®] Technology replaces the popular and widely-used linear air motor technology with improved ergonomics, precise metering of the hydraulic oil flow and also offers a higher oil delivery for increased productivity and efficiency.

XVARI ~ Be in control

XVARI[®] Technology enables users to continuously and precisely control the amount of hydraulic oil flow in advance and retract mode and thereby the speed of the hydraulic cylinder or tool that the pump is powering - specifically for jobs that require accurate load positioning, aligning and controlled descend.

XVARI[®] Technology enables the user to better control the hydraulic application, improves productivity, enhances process quality and makes the workplace safer.

Stay balanced

Enerpac is 'breaking the mold' by applying a two pedal design: one for tool advance (pressure) and one for tool retract (release). This two pedal design meets the objectives of an ergonomically better product. The pedals are depressed with the ball of the foot, whereby the heel stays on the ground. The bodyweight therefore rests on two legs during the operation. This causes less fatigue and provides increased stability and better control over the degree of pressing and thus the control of the pump. To control the pressure, the pump can be optionally equipped with an integrated pressure gauge.

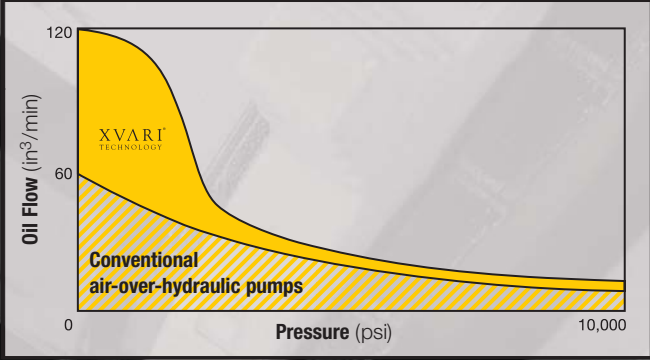
The completely closed housing is manufactured from durable glass-filled nylon and provided with extra protection on the corners in the form of stiff cast rubber corner pieces.



in Air Driven Hydraulic Pump Technology

Under the 'cover'

The heart of the XA-Series is a revolutionary machine of technology, which patents have been applied for. Proven technologies and functions were used in the construction. It was clear from market research that many users wanted a higher hydraulic delivery. With the new pump, the hydraulic delivery is up to 50% higher than with conventional air-over-hydraulic pumps. Enerpac has achieved the air driven pump segment leading oil flow, by using a rotating air motor and a rotating two-stage pump element instead of a linear air motor driving a single hydraulic piston. By pressing the pedal further down the speed of the rotating air motor can be accurately controlled.

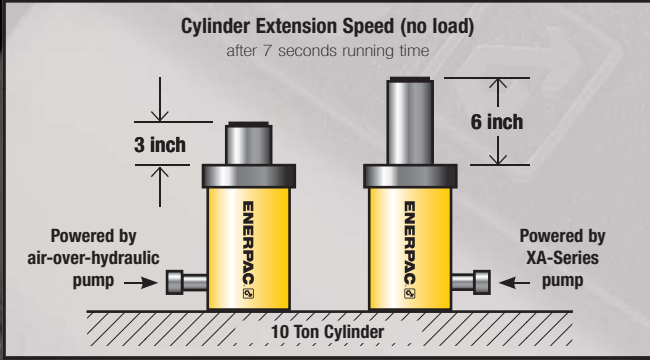


XVARI® Technology, Hydraulic Flow Performance

This provides a variable oil flow, so that the speed and positioning of the hydraulic cylinder or tool can be controlled much more precisely. The advantage is that the user has more control over the hydraulic pump and work being performed. Higher piston speeds result in a smooth oil flow compared to the pulsating oil flow of the conventional air-over-hydraulic technology. A closed oil reservoir prevents leakage and eliminates internal contamination from air borne particles. Stability of the XA-Series pump is second to none with a slightly larger base area.

Time is money

With the higher oil flow, the time required to extend the cylinder or tool and build to maximum pressure has been considerably reduced. Compared to many conventional air-over-hydraulic pumps the XA-Series is up to 2 times as fast. Enerpac developed a special hydraulic release valve for the retract function. This valve is accurately controlled by the release pedal. The more the pedal is depressed, the faster the hydraulic pressure reduces and the cylinder or tool retracts. This product characteristic results in a much better control over the retract function, think for example of a load that must be lowered slowly and in a controlled manner.



XVARI® Technology, Cylinder Extension Speed

The time is now to swap your pump for the new XA-Series with XVARI® Technology.



▼ Shown: **XA11G**



- Ergonomic design for less operator fatigue
- Variable oil flow and fine metering for precise control
- Higher oil flow for increased productivity
- Closed hydraulic system prevents contamination and allows pump usage in any position
- Pedal lock function for retract position
- Ground screw for improved ATEX explosion safety
- External adjustable pressure setting valve

▼ Easy operated by foot. No need to fully lift up foot – rest bodyweight on heel, resulting in a hands-free and stable working position.



XVARI[®] TECHNOLOGY

Productivity & Ergonomics



Optional Pressure Gauge

Integrated gauge with calibrated scale reading in psi, bar and MPa for actual pressure reading.



Optional 4-Way 3-Position Valve

For powering double-acting hydraulic cylinders and tools.



Optional 2 Liter Reservoir

Double oil capacity for powering larger hydraulic cylinders and tools.



Pedal Safety Guard

Customer installed frame protects both pedals against accidental activation.

Order model number ¹⁾

XPG1



“Joy-stick” Lever Kit

Customer installed set of handles for manual operation of both pedals.

Order model number ¹⁾

XLK1



Hydraulic Swivel Connector

Customer installed swivel connector for optimal orientation of the

hydraulic hose.

Order model number ¹⁾

XSC1

¹⁾ Accessories must be ordered separately.

XVARI® Technology, Air Driven Hydraulic Pumps



XVARI® Technology Production Application

XA11 pump is used with a 13 ton hollow cylinder to compress and position diesel engine valve springs. The operator benefits from the fine metering capacities of the XVARI® Technology to apply the mandatory precise stroke and force.

www.xvari.com

XA Series



Reservoir Capacity:
61 - 122 in³

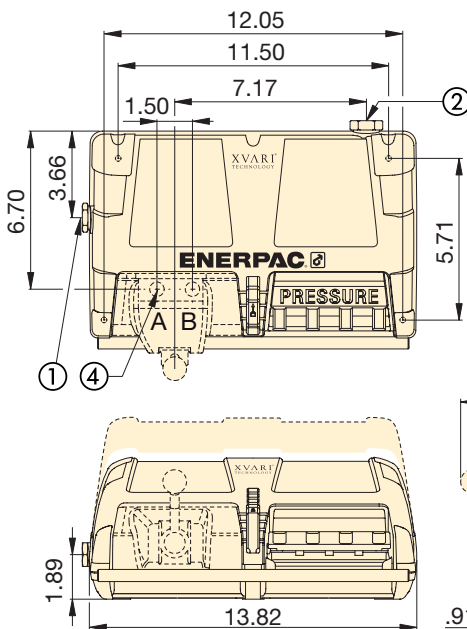
Flow at Rated Pressure:
15 in³/min

Air Consumption:
10 - 35 ft³/min

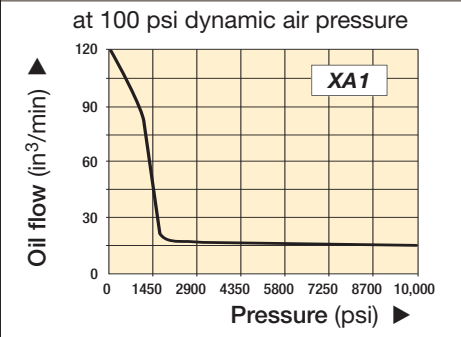
Maximum Operating Pressure:
10,000 psi

▼ XA-SERIES PERFORMANCE CHART

Maximum Pressure (psi)	Output Flow Rate (in ³ /min)		Pump Series	Valve Function	Dynamic Air Pressure (psi)
	No load	Load			
10,000	120	15	XA1	Advance/Hold/Retract	30 - 125



FLOW CHART



Regulator-Filter-Lubricator

Recommended for use with all XA-Series Air pumps. Provides clean, lubricated air and allows for air pressure adjustment.

Order model number

RFL102

▼ SELECTION CHART

For use with cylinder or tool	Usable Oil Capacity (in ³)	Model Number ¹⁾	Pressure Gauge	3-way 3-pos. Valve	4-way 3-pos. Valve	Dimensions (in)			Weight (lbs)
						H1	H2	L	
Single-acting	61	XA 11	—	•	—	5.98	—	—	19
	122	XA 12	—	•	—	—	6.69	—	22.4
Single-acting	61	XA 11G	•	•	—	5.98	—	—	19.4
	122	XA 12G	•	•	—	—	6.69	—	22.9
Double-acting	61	XA 11V	—	—	•	5.98	—	10.98	22.3
	122	XA 12V	—	—	•	—	6.69	10.98	25.7
Double-acting	61	XA 11VG	•	—	•	5.98	—	10.98	22.7
	122	XA 12VG	•	—	•	—	6.69	10.98	26.2

¹⁾ High-Flow coupler CR400 and accessories must be ordered separately.

XVARI[®] Technology, Air Driven Hydraulic Pumps

Enerpac Worldwide Locations

Africa

ENERPAC Middle East FZE
Office 423, JAFZA 15
P.O. Box 18004
Jebel Ali, Dubai
United Arab Emirates
Tel: +971 (0)4 8872686
Fax: +971 (0)4 8872687

Australia, New Zealand

Actuant Australia Ltd.
Block V Unit 3
Regents Park Estate
391 Park Road
Regents Park NSW 2143
(P.O. Box 261)
Australia
Tel: +61 297 438 988
Fax: +61 297 438 648

Brazil

Power Packer do Brasil Ltda.
Rua dos Inocentes, 587
04764-050 - Sao Paulo (SP)
Tel: +55 11 5687 2211
Fax: +55 11 5686 5583
Toll Free in Brazil:
Tel: 0800 891 5770
vendabrasil@enerpac.com

Canada

Actuant Canada Corporation
6615 Ordan Drive, Unit 14-15
Mississauga, Ontario L5T 1X2
Tel: +1 905 564 5749
Fax: +1 905 564 0305
Toll Free:
Tel: +1 800 268 4987
Fax: +1 800 461 2456
Technical Inquiries:
techservices@enerpac.com

China

Actuant China Ltd.
1F, 269 Fute N. Road
Waigaoqiao Free Trade Zone
Pudong New District
Shanghai, 200 131 China
Tel: +86 21 5866 9099
Fax: +86 21 5866 7156

Actuant China Ltd. (Beijing)

709B Diyang Building
Xin No. 2
Dong San Huan North Rd.
Beijing City
100028 China
Tel: +86 10 845 36166
Fax: +86 10 845 36220

Central and Eastern Europe, Greece

ENERPAC GmbH
P.O. Box 300113
D-40401 Düsseldorf
Willstätterstrasse13
D-40549 Düsseldorf
Germany
Tel: +49 211 471 490
Fax: +49 211 471 49 28

France, Switzerland francophone

ENERPAC
Une division de ACTUANT
France S.A.
ZA de Courtaboeuf
32, avenue de la Baltique
91140 VILLEBON /YVETTE
France
Tel: +33 1 60 13 68 68
Fax: +33 1 69 20 37 50

Germany, Austria and Switzerland

ENERPAC GmbH
P.O. Box 300113
D-40401 Düsseldorf
Willstätterstrasse13
D-40549 Düsseldorf
Germany
Tel: +49 211 471 490
Fax: +49 211 471 49 28

India

ENERPAC Hydraulics
(India) Pvt. Ltd.
Office No. 9,10 & 11,
Plot No. 56, Monarch Plaza,
Sector 11, C.B.D. Belapur
Navi Mumbai 400614, India
Tel: +91 22 2756 6090
Tel: +91 22 2756 6091
Fax: +91 22 2756 6095

Italy

ENERPAC S.p.A.
Via Canova 4
20094 Corsico (Milano)
Tel: +39 02 4861 111
Fax: +39 02 4860 1288

Japan

Applied Power Japan LTD KK
Besshochou 85-7
Saitama-shi, Kita-ku,
Saitama 331-0821
Japan
Tel: +81 48 662 4911
Fax: +81 48 662 4955

Middle East, Turkey and Caspian Sea

ENERPAC Middle East FZE
Office 423, JAFZA 15
P.O. Box 18004,
Jebel Ali, Dubai
United Arab Emirates
Tel: +971 (0)4 8872686
Fax: +971 (0)4 8872687

Russia and CIS

(excl. Caspian Sea Countries)
Actuant LLC
Admiral Makarov Street 8
125212 Moscow
Russia
Tel: +7-495-9809091
Fax: +7-495-9809092

Singapore

Actuant Asia Pte. Ltd.
37C, Benoi Road Pioneer Lot,
Singapore 627796
Tel: +65 68 63 0611
Fax: +65 64 84 5669
Toll Free:
Tel: +1800 363 7722
Technical Inquiries:
techsupport@enerpac.com.sg

South Korea

Actuant Korea Ltd.
3Ba 717,
Shihwa Industrial Complex
Jungwang-Dong, Shihung-Shi,
Kyunggi-Do
Republic of Korea 429-450
Tel: +82 31 434 4506
Fax: +82 31 434 4507

Spain and Portugal

ENERPAC
Avda. Los Frailes, 40 - Nave C & D
Pol. Ind. Los Frailesancho De Arriba
(Madrid) Spain
Tel: +34 91 661 11 25
Fax: +34 91 661 47 89

The Netherlands, Belgium, Luxembourg, Sweden, Denmark, Norway, Finland and Baltic States

ENERPAC B.V.
Galvanistraat 115, 6716 AE Ede
P.O. Box 8097, 6710 AB Ede
The Netherlands
Tel: +31 318 535 911
Fax: +31 318 525 613
+31 318 535 848
Technical Inquiries Europe:
techsupport.europe@enerpac.com

United Kingdom and Ireland

ENERPAC Ltd.,
Bentley Road South
Darlaston, West Midlands
WS10 8LQ, England
Tel: +44 (0)121 50 50 787
Fax: +44 (0)121 50 50 799

USA, Latin America and Caribbean

ENERPAC
P.O. Box 3241
6100 N. Baker Road
Milwaukee, WI 53209 USA
Tel: +1 262 781 6600
Fax: +1 262 783 9562
User inquiries:
+1 800 433 2766
Distributor inquiries/orders:
+1 800 558 0530
Technical Inquiries:
techservices@enerpac.com

Your Enerpac Distributor:

Email: info@enerpac.com
Internet: www.enerpac.com
www.xvari.com

ENERPAC 
Hydraulic Technology Worldwide