EVO-Series, Synchronous Lifting Systems

ENERPAC. 🗗

EV0840380



- Modular lifting pumps to control 4, 8 or 12 lifting points •
- Can be connected to single- or double-acting cylinders with the • same or different lifting capacities
- PLC-controlled system with integrated 10,000 psi hydraulic power . unit and 66 gallon reservoir
- Network capability to link up to 4 EVO-units (HPUs) to a separate • network controller
- Intuitive user interface providing easy set up, control and navigation
- Data storage and recording capabilities •
- Variable frequency drive motor (VFDM) and PLC for precise • synchronization and oil flow control.
- The superlifting and launch of a 43,000-ton floating oil production system in Malaysia for the Gumusut-Kakap offshore field has set high benchmarks for safety through its use of sophisticated EVO-Series synchronous hydraulics to lift, balance, weigh and smoothly launch massive resource structures.



The multi-functional synchronous lifting systems



CLNC12 Network Controller

Easily monitor and control a multipoint synchronized lift. All network control boxes feature an industrial grade touch screen

and a user-friendly interface. Same controller can be used to operate either SFP-Series Split-Flow Pumps or multifunctional EVO-Series lifting systems.



EVO-SC, Stroke Sensor Cables

Can be connected together for additional length. Ordered separately, requires one for each stroke sensor.

Model	Length	Model	Length
Number	(ft)	Number	(ft)
EVO-SC-6	19.7	EVO-SC-25	82



EVO-WSS, Wire Stroke Sensors

Provides stroke feedback to controls. Includes magnets for mounting. Ordered separately, requires one sensor for each

lifting point. Available in measuring range of 19.7 and 39.4 inches. Other lengths available on request.

Model	Range	Model	Range
Number	(in)	Number	(in)
EVO-WSS-500	19.7	EV0-WSS-1000	39.4



Communication Cables

EVO-COMM-Series communication cables transfer information about the synchronized lift operation from the network control panel to each of the

connected hydraulic pumps.

Model Number	Length (ft)	Model Number	Length (ft)
EVO-COMM-25	82	EVO-COMM-75	246
EVO-COMM-50	164	EVO-COMM-100	328

Synchronous Lifting Systems



Benefits of the EVO-Series System

Precise control of multiple lift points

- Comprehensive understanding and management of a lifting operation from a central control system improves safety and operational productivity.
- Programmable synchronized lifting.
 Automatic stop at pre-set cylinder stroke or load limit.

Safe and efficient movement of loads

• System secured with warning and stop features to realize optimal safety.

High accuracy

- Variable frequency drive (VDFM) and PLC for precise synchronization and control of oil flow, stroke and speed.
- Depending the cylinder capacities used, an accuracy of 0.040 inch (1,0 mm) between lifting points is achieved.

Ease of operation

- User friendly interface: visual screens, icons, symbols and color coding.
- A single operator controls the entire operation.

Monitoring and Data Recording

- Displays data of the operation.
- Data recording at user-defined intervals.
- Data storage and read-out for reporting.

Network capability

• Ethernet IP protocol for communication between hydraulic power units, allow easy "plug and play".

EVOLCK-12 Load Cell Connection Kit

- Install electronic load cells when applications require high accuracy of load measurement
- Kit allows connection of up to 12 electronic load cells
- Plug and play connection to standard EVO lifting system
- Weighing accuracy as good as 1% of total load

Global standardized system

• Enerpac global coverage ensures local support.



Series



Number of Lifting Points: 4 - 8 -12 (up to 48)

Reservoir Capacity:

66 gallon

Flow at Rated Pressure: 46 - 292 in³/min

Motor Size: **4 - 10 hp**

Maximum Operating Pressure:

10,000 psi



EVOLCK-12, Load Cell Connection Kit

Allows connection up to 12 electronic load cells to standard EVO-system.



High-Tonnage Cylinders

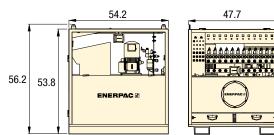
The Enerpac High-Tonnage Cylinders are particularly suitable for (multipoint) lifting applications. Options include single or double-

acting with and without mechanical lock nuts for load holding.



 Precision levelling caisson pier box: 3 EVO-Systems connected with 32 jacks lowered the 1100 ton bascule pier box.





EVO-Series (Standard)

Lifting Points	at 6	e Oil Flow 60 Hz /min)	Model Number ¹⁾ 460-480 V, 3 ph, 50-60 Hz	Usable Oil Capacity	Motor Size	Motor Speed ²⁾	à
	(< 1800 psi)	(> 1800 psi)		(gal)	(hp)		(lbs)
4	243 - 812	46 - 153	EVO421460	66	4	VFDM	2000
4	285 - 951	88 - 292	EVO440460	66	10	VFDM	2210
8	243 - 812	46 - 153	EVO821460	66	4	VFDM	2000
8	285 - 951	88 - 292	EVO840460	66	10	VFDM	2000
12	243 - 812	46 - 153	EVO1221460	66	4	VFDM	2025
12	285 - 951	88 - 292	EVO1240460	66	10	VFDM	2250

¹⁾ For 380-415 VAC, 3 phase, 50-60 Hz change 460 in model number into 380. Example **EV0421380**.

 $^{2)}$ VFDM = Variable Frequency Drive 15-60 Hz.