



SECOH

Diaphragm Linear Pumps

About SECOH

SECOH SANGYO CO.,LTD. has been manufacturing oilless diaphragm linear pumps since its foundation in 1966.

Our products are backed by experienced Research and Development and Product engineers to help you find or develop a product to meet your specific pneumatic requirements. We are especially proud of our lasting commitment to quality as each product that we manufacture is thoroughly tested to assure that our customers receive high quality products.



Table of Contents

MKC-510V

0.35CFM (10LPM)

P3



SLL-20▶50

0.71 ~ 1.77CFM (20 ~ 50LPM)

P4



EL-60▶100

2.12 ~ 3.53CFM (60 ~ 100LPM)

P5



EL-120W▶200

4.24 ~ 7.06CFM (120 ~ 200LPM)

P6



MK-10

0.35CFM (10LPM)

P7



SV-20▶50

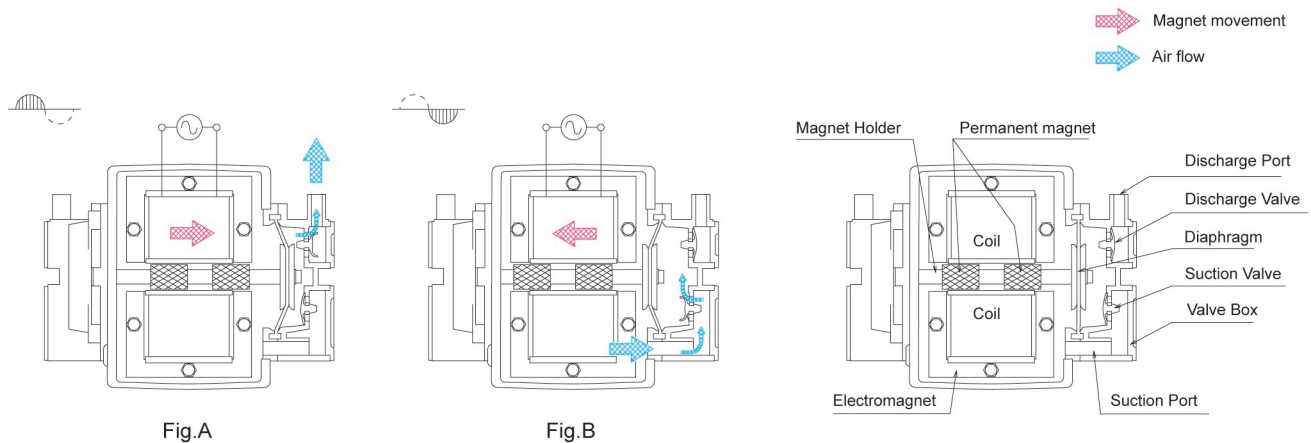
0.71 ~ 1.77CFM (20 ~ 50LPM)

P8



Operating Principle

The activated electromagnets put the magnet into oscillation movements. It moves first in the direction of the arrow in Fig. A and then in the direction of the arrow in Fig. B. The magnet, which moves back and forth between the electromagnets at the same frequency as that of the power supply changes the valve box volume, creating pressure or vacuum.



Advantages

SECOH diaphragm linear pumps have the following superior advantages.

- Completely Oil free
- Compact and light construction
- Low vibration
- Very little pulsation
- Low maintenance

Applications

Our oilless diaphragm linear pumps are used in a broad range of applications throughout the world. Typical applications for SECOH pumps include:

- Onsite wastewater treatment plant
- Air mattresses
- Aquaculture aeration
- Ink jet printers
- Circulation therapy
- Blood cuff monitors
- Air sampling/monitoring
- Liquid agitation
- Vacuum tweezers

Glossary

Voltage:	All data given refer to 220VAC/50Hz and 115VAC/60Hz. Models for other voltages available on request.
Rated pressure :	Normal operating pressure.
Air flow :	Air flow at rated pressure
Power :	Input wattage at rated pressure

MKC-510V

CE In compliance with the European Community's Machinery Directive



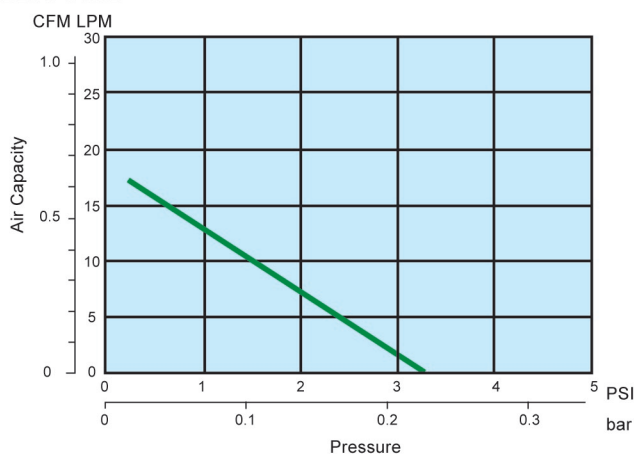
Data is subject to change without notice.

Specifications

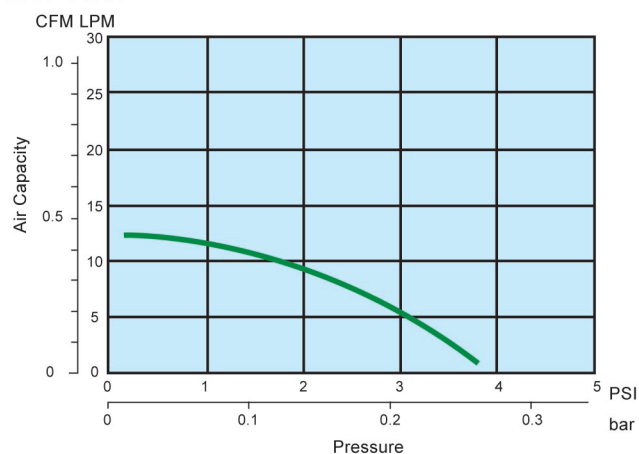
Model	Voltage	Frequency	Rated Pressure		Air flow		Power	Net weight	
	VAC	Hz	PSI	bar	CFM	LPM	W	lbs.	kg
MKC-510V	220	50	1.4	0.1	0.35	10	8	2.6	1.2
	115	60	1.4	0.1	0.35	10	10	2.6	1.2

Performance Curves

220V 50Hz

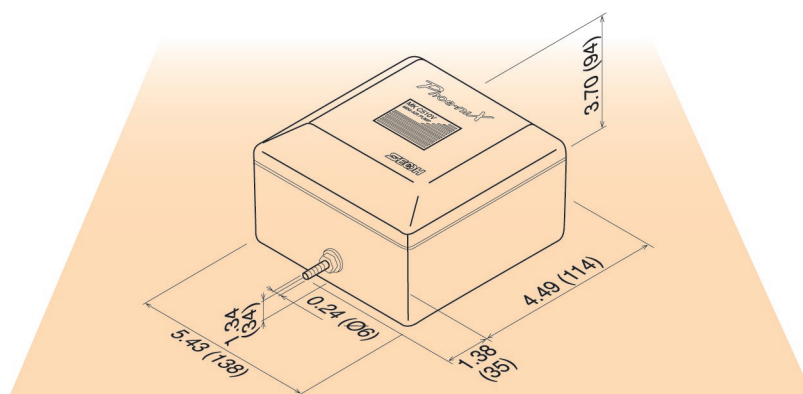


115V 60Hz



Dimensions (Inches)

Millimetres are in ()



SLL-20►50



SLL-20,30,40 have earned the UL Listing Mark.



In compliance with the European Community's Machinery Directive



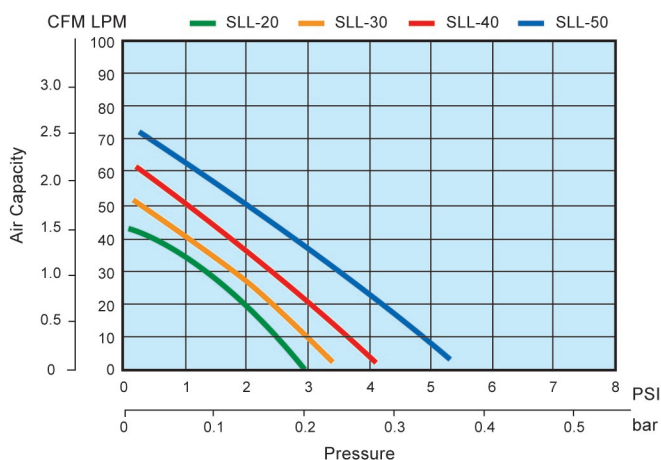
Data is subject to change without notice.

Specifications

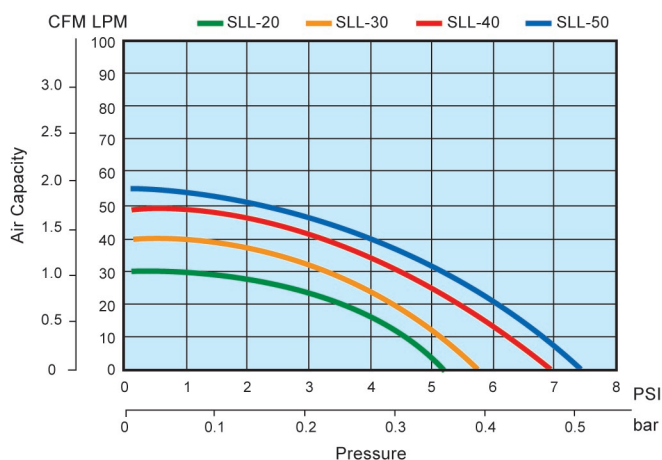
Model	Voltage	Frequency	Rated Pressure		Air flow		Power	Net weight	
	VAC	Hz	PSI	bar	CFM	LPM	W	lbs.	kg
SLL-20	220	50	1.7	0.12	0.81	23	15	9.9	4.5
	115	60	1.7	0.12	0.99	28	23	9.9	4.5
SLL-30	220	50	1.7	0.12	1.17	33	25	9.9	4.5
	115	60	1.7	0.12	1.31	37	32	9.9	4.5
SLL-40	220	50	1.7	0.12	1.41	40	35	9.9	4.5
	115	60	1.7	0.12	1.62	46	45	9.9	4.5
SLL-50	220	50	1.8	0.13	1.77	50	50	9.9	4.5
	115	60	1.8	0.13	1.80	51	56	9.9	4.5

Performance Curves

220V 50Hz

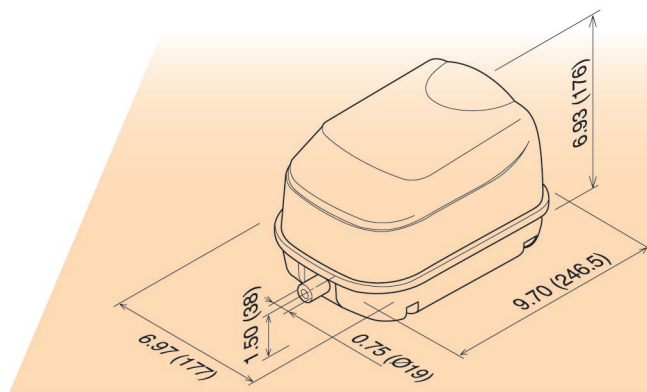


115V 60Hz



Dimensions (Inches)

Millimetres are in ()



EL-60▶100



EL-60,80-15,80-17, 100 have earned the UL Listing Mark.



In compliance with the European Community's Machinery Directive



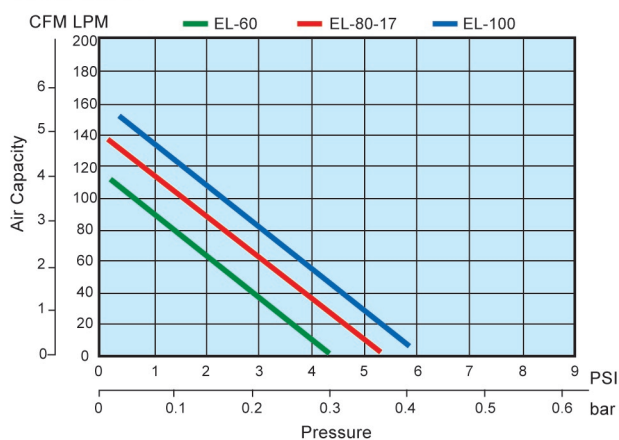
Data is subject to change without notice.

Specifications

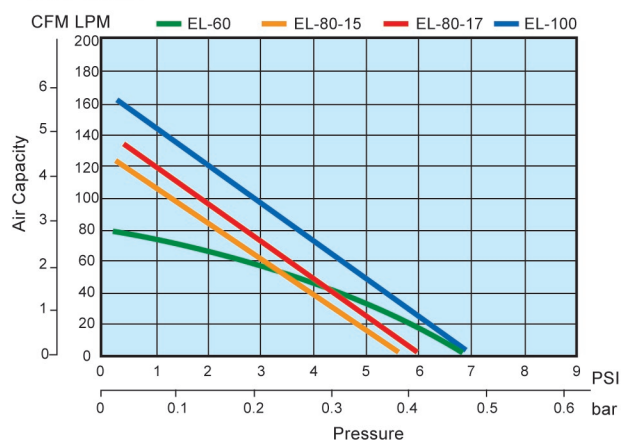
Model	Voltage VAC	Frequency Hz	Rated Pressure		Air flow		Power W	Net weight	
			PSI	bar	CFM	LPM		lbs.	kg
EL-60	220	50	2.1	0.15	2.12	60	60	18.7	8.5
	115	60	2.1	0.15	2.30	65	56	18.7	8.5
EL-80-15	115	60	2.1	0.15	2.82	80	61	18.7	8.5
EL-80-17	220	50	2.4	0.17	2.82	80	80	18.7	8.5
	115	60	2.4	0.17	3.00	85	71	18.7	8.5
EL-100	220	50	2.4	0.17	3.53	100	100	18.7	8.5
	115	60	2.4	0.17	3.88	110	106	18.7	8.5

Performance Curves

220V 50Hz

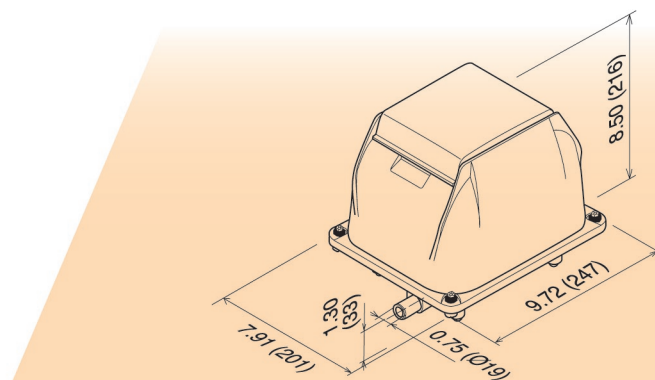


115V 60Hz



Dimensions (Inches)

Millimetres are in ()



EL-120W ▶ 200



EL-120W, 150, 200 have earned the UL listing Mark.



In compliance with the European Community's Machinery Directive



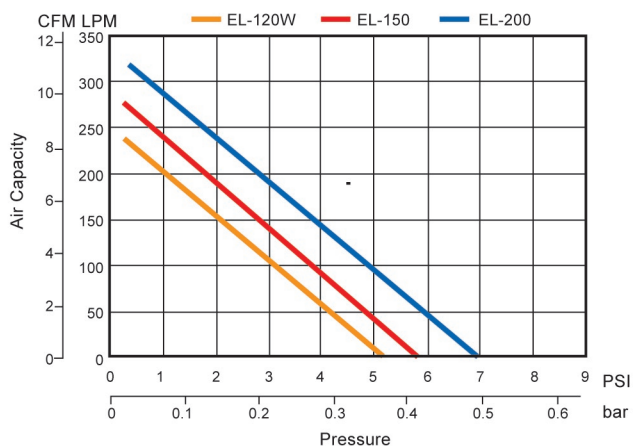
Data is subject to change without notice.

Specifications

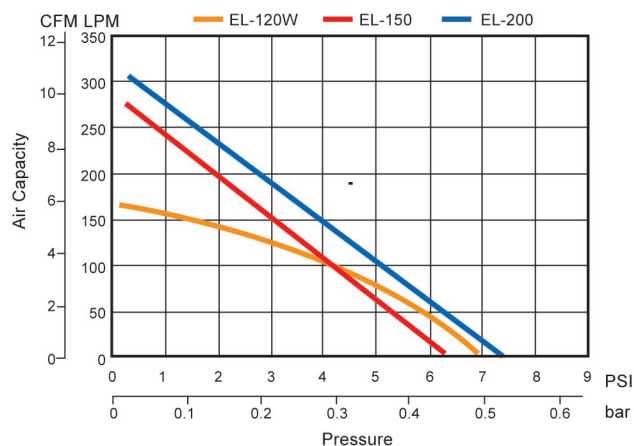
Model	Voltage	Frequency	Rated Pressure		Air flow		Power	Net weight	
	VAC	Hz	PSI	bar	CFM	LPM	W	lbs.	kg
EL-120W	220	50	2.8	0.2	4.24	120	110	35.3	16
	115	60	2.8	0.2	4.41	125	126	35.3	16
EL-150	220	50	2.8	0.2	5.30	150	138	35.3	16
	115	60	2.8	0.2	5.47	155	150	35.3	16
EL-200	220	50	2.8	0.2	7.06	200	200	35.3	16
	115	60	2.8	0.2	7.06	200	194	35.3	16

Performance Curves

220V 50Hz

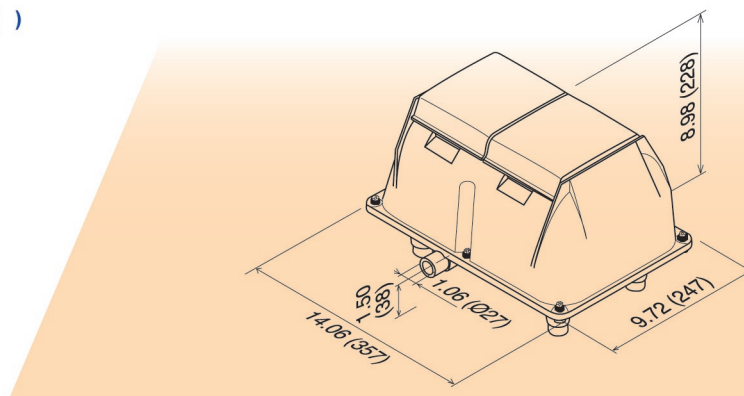


115V 60Hz



Dimensions (Inches)

Millimetres are in ()



MK-10



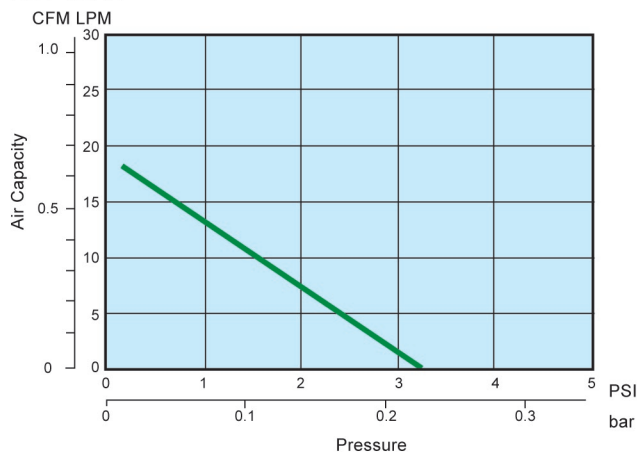
Data is subject to change without notice.

Specifications

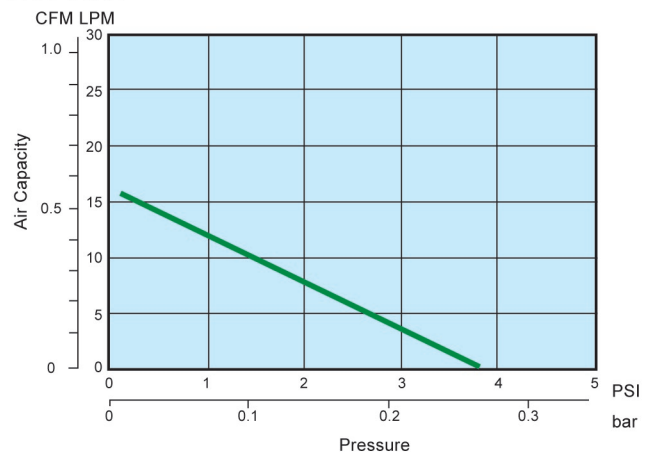
Model	Voltage	Frequency	Rated Pressure		Air flow		Power	Net weight	
	VAC	Hz	PSI	bar	CFM	LPM	W	lbs.	kg
MK-10	220	50	1.4	0.1	0.35	10	8	1.5	0.7
	115	60	1.4	0.1	0.35	10	8	1.5	0.7

Performance Curves

220V 50Hz

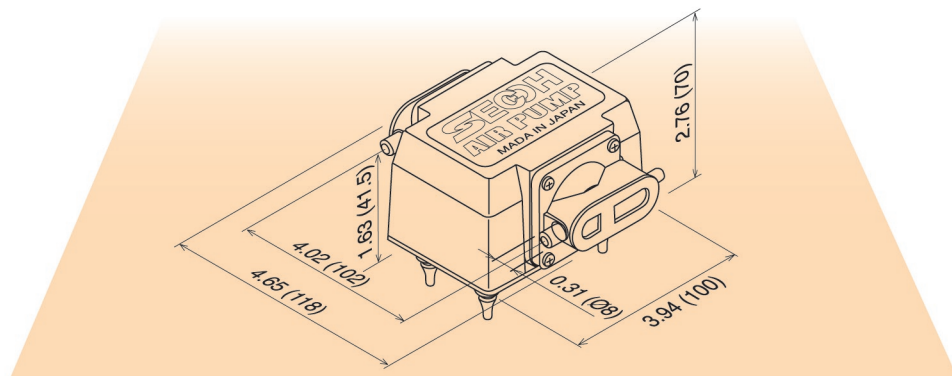


115V 60Hz

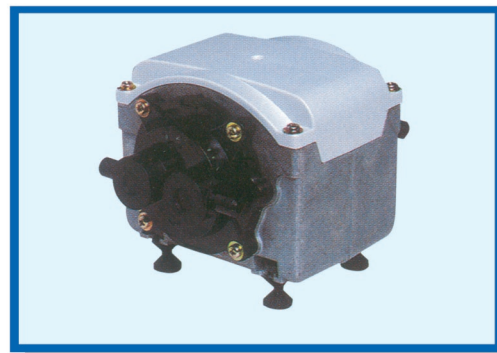


Dimensions (Inches)

Millimetres are in ()



SV-20►50



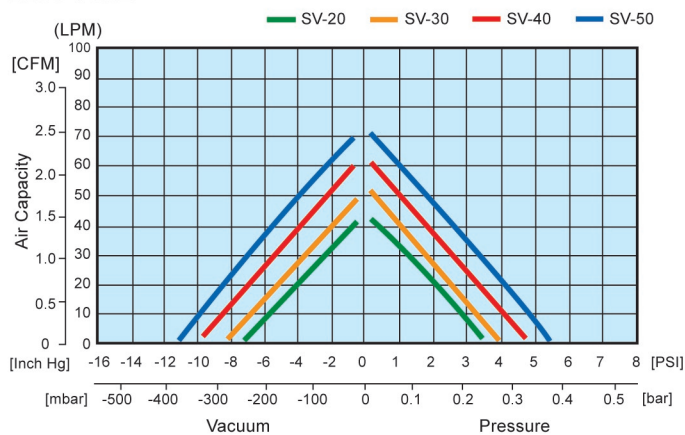
Data is subject to change without notice.

Specifications

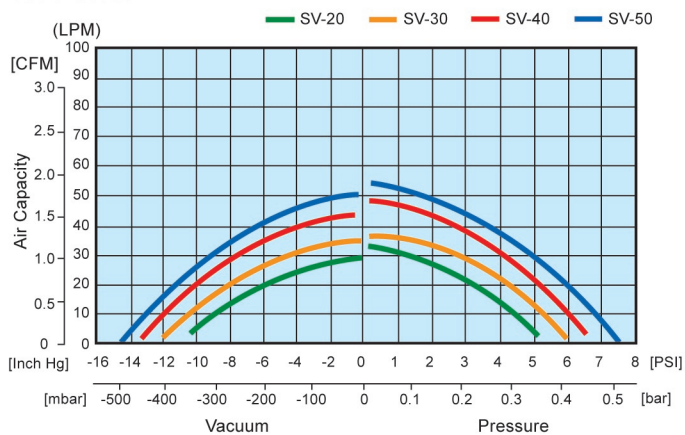
Model	Voltage	Frequency	Ultimate Vacuum		Rated Pressure		Air flow		Power	Net weight	
	VAC	Hz	hg	mbar	PSI	bar	CEM	LPM	W	lbs.	kg
SV-20	220	50	-7.23	-245	1.7	0.12	0.88	25	17	5.5	2.5
	115	60	-10.63	-360	1.7	0.12	0.95	27	21	5.5	2.5
SV-30	220	50	-8.12	-275	1.7	0.12	1.06	30	25	5.5	2.5
	115	60	-12.40	-420	1.7	0.12	1.20	34	30	5.5	2.5
SV-40	220	50	-9.57	-324	1.7	0.12	1.41	40	35	5.5	2.5
	115	60	-13.88	-470	1.7	0.12	1.59	45	42	5.5	2.5
SV-50	220	50	-11.01	-373	1.8	0.13	1.77	50	50	5.5	2.5
	115	60	-15.06	-510	1.8	0.13	1.77	50	53	5.5	2.5

Performance Curves

220V 50Hz

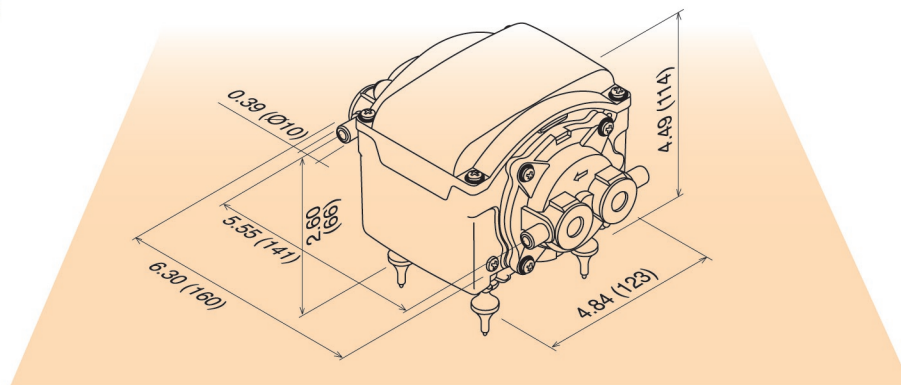


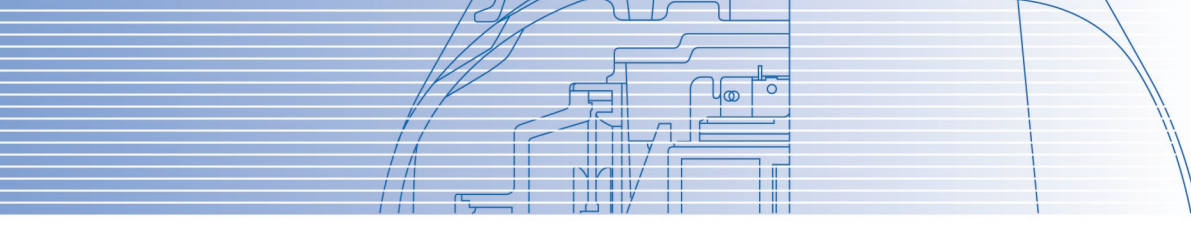
115V 60Hz



Dimensions (Inches)

Millimetres are in ()





Technical references

Operating pressure

Special care is necessary when the pump is operating over the rated pressure. Consult our distributor.

The life of the diaphragms and valves may be shortened by overheating due to excess pressure.

Duty cycle

The pumps are designed for continuous operation at rated pressure. Consult our distributor in case of intermittent operation.

Life of the pump

The working life of pump depends on the operating conditions such as duty cycle, operating pressure or vacuum, ambient temperature, air quality, ventilation, maintenance, etc.

Insulation class

All models have class “E” insulation which corresponds to a temperature limit of 248 degrees F (120 degrees C).

Ambient temperature

The ambient temperature range should be from 14 to 104 degrees F (From -10 to 40 degrees C).

Overload protection

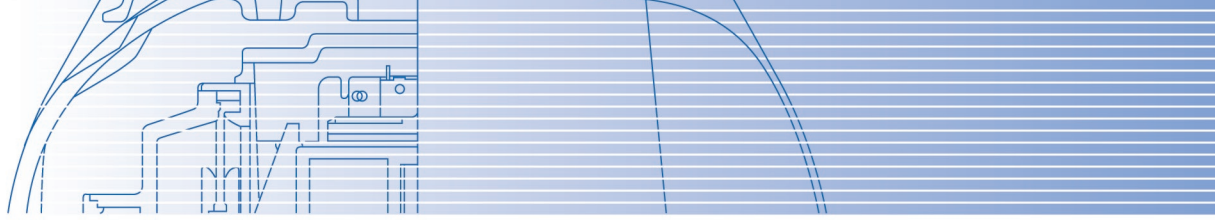
The SLL, SV and EL series are supplied with a thermal overload protector for coil protection.

Auto-stopper

The EL series is supplied with a protection switch which stops pump operation in case of a diaphragm breakage to protect magnet and coils.

Installation

The pump must be installed above the water level. If the pump is set below, the back-flowing water can cause an electrical short circuit.



Air Use only

SECOH pumps are designed for handling air only. Flammable, hazardous, or aggressive gasses and vapors must not enter the pump. Relative humidity should not be higher than 90%

Ambient

Make sure that the unit has good ventilation. Do not expose pump to direct sunlight. Cool ambient temperatures will prolong diaphragm and valve life.

Do not operate in a dusty environment. The life of the diaphragms and valves may be shortened by overheating due to easily clogged filter elements.

Do not immerse pump in water, snow.

Storage

The pump should not be stored in direct sunlight or at high temperatures as rubber parts will deteriorate.

The information presented in this catalog is based on technical and test results of nominal units. It is believed to be accurate and is offered as an aid in the selection of the products. It is the user's responsibility to determine suitability of the product for intended use and the user assumes all risk and liability whatsoever in connection therewith. Environmental and application conditions may affect advertised life.

MANUFACTURED BY



URL : <http://www.secoh.co.jp>

Head Office And Factory in Japan:

966 Ogo, Tabuse-cho, Kumage-gun, Yamaguchi-pref, 742-1513 Japan

Tel : +81-820-52-2147 Fax : +81-820-52-2148

E-mail : info@secoh.co.jp

Branch Factory in Shanghai:

SECOH SHANGHAI MEC.LTD.

160 Fazhan East Road, Xuanqiao Town, Nanhui District, Shanghai 201300

Tel: 0086-21-58039266 Fax: 0086-21-58039265

Quality Guaranteed By

M R M CO., LTD.

57 M R M Building, Soi Preeyanuch (Rama IX 19), Rama IX Rd., Bangkok, Huay Kwang, Bangkok 10310

Tel : 0-2319-9911 (10 Lines Auto) Fax : 0-2319-9912

E-mail: mrmbkkoa@samart.co.th (JPN & ENG) : mrnthoa@samart.co.th (THAI & ENG) : mrnm@shinmaywathai.com

MRM website...<http://www.shinmaywathai.com>

ISO 9001 : 2000 Committed