

# LSN • PUMPS



**WE GUARANTEE:**

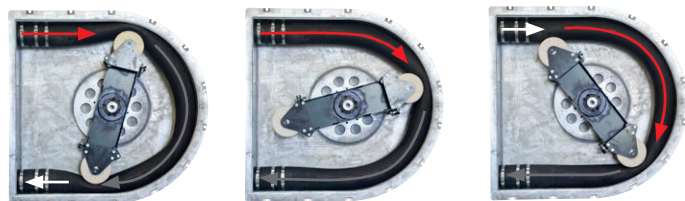
**HIGH QUALITY | LOW ENERGY CONSUMPTION  
EASY TO MAINTAIN | PRODUCED IN DENMARK**



# OPERATIONAL PRINCIPLES FOR LSM PERISTALTIC HOSE PUMPS

## ADVANTAGES OF THE LSM HOSE PUMP

- It is reversible. Depending on what the rotation direction is set to, the influx and outflow for the pump can be either at the top or at the bottom.
- It is self-priming.
- Easy to service. The pump does not need to be dismantled during hose changes.
- Can run dry
- The pump is sealed and protected against back flow, even when it is not in operation as the rollers always push the hose flat.
- Good hygiene. Only the hose is in contact with the fluid which is being pumped. Bearings and gaskets are not affected. Abrasive fluid does not affect the pump.
- Solid objects can to a certain extent pass through the hose. Depending on the hose's diameter, it is possible to handle foreign objects such as sand, pebbles and similar. It can even handle fish up to a certain size, without damage.
- Is suitable for fluids with a high viscosity and a high dry matter content.



- Low energy consumption compared to other pumps. The glycerine in the pump casing lubricates the hose and the rollers in the pump, which results in a very low energy consumption.

The main components of an LSM hose pump are the pump casing, the hose and the rotor. When the rotor turns, the rollers on the rotor squeeze the hose flat. In front of the roller, pressure builds up and because of the hose's elasticity a vacuum builds up behind the roller. The pressure pushes the fluid out of the hose and the vacuum sucks the new fluid in.

## SEGMENTS

The applications are endless for the versatile LSM hose pumps, and they are used in a wide variety of industries in Denmark and abroad. The industries include:

### FOOD INDUSTRY:

- Abattoirs
- Food production

### FISHING INDUSTRY:

- Transferring
- Fish farming
- Production
- Fish

### MINE- AND CONTRACTOR INDUSTRY:

- Drilling sludge
- Mining sludge
- Residue

### CHEMICAL INDUSTRY:

- Laboratories
- Hygiene products

### AGRICULTURAL INDUSTRY:

- Slurry
- Seed dressing
- Feed

### BIOGAS:

- Slurry
- Food waste
- Agro products
- Biosubstrate

### ON/OFF SHORE:

- Waste oil
- Cutting

### TREATMENT PLANT:

- Sewage water
- Sludge
- Percolate water

### OTHER INDUSTRIES:

- Production of concrete
- Production of paint
- Etc.



# MATERIAL – UPGRADE – ADDITIONAL

LSM model	10	15	25	32	40	50	65	80	100	125	150	200
LSM pump versions:												
Plastic (PP)	•	•										
Stainless steel (AISI304)			•	•	•	•	•	•	•	•	•	•
Steel (Galvanised/coated)	•	•	•	•	•	•	•	•	•	•	•	•
Upgrade to an LSM pump:												
Control box for operation							•	•	•	•	•	•
ATEX	•	•	•	•	•	•	•	•	•	•	•	•
Heavy duty version									•	•	•	•
Additions for LSM pumps:												
Stainless steel cover over gear/motor			•	•	•	•	•	•	•	•	•	•
Operation monitoring	•	•	•	•	•	•	•	•	•	•	•	•
Vacuum pump									•	•	•	•
Pulsation damper	•	•	•	•	•	•	•	•	•	•	•	•
Coating of connecting pipes	•	•	•	•	•	•	•	•	•	•	•	•
Frequency converter	•	•	•	•	•	•	•	•	•	•	•	•
Pipes, fittings, etc	•	•	•	•	•	•	•	•	•	•	•	•
Mounting, installation, etc.	•	•	•	•	•	•	•	•	•	•	•	•
Service agreement	•	•	•	•	•	•	•	•	•	•	•	•

• Possible

### ELECTRICAL BOX FOR OPERATION:

On our larger pump models, we offer electrical control boxes for either manual or automatic operation, in collaboration with additional automation.

### ATEX CERTIFICATE:

All pumps can be supplied with an ATEX certificate.

### HEAVY DUTY:

For demanding industrial applications, we can offer a heavy-duty version.

### STAINLESS STEEL COVER OVER GEAR/MOTOR:

If the pump is placed outdoors, we offer stainless steel covers to protect the gear/motor.

### OPERATION MONITORING:

For many of our users, reliable monitoring of pumps and installations

is very important. We can provide sensors and advise about proper fitting and use of sensors to monitor operations.

### VACUUM PUMPS:

Vacuum pumps are available in many different sizes and are selected according to the specifications for the particular vacuum installation.

### PULSATION DAMPER:

It is a characteristic of hose pumps that they pulsate. Where this is a problem, we can supply different pulsation damper solutions to eliminate the pulsation.

### COATING OF CONNECTING PIPES:

If the fluid erodes the connecting pipes, we can – in cooperation with our supplier – find countless solutions for the surface treatment of the connecting pipes.

### FREQUENCY CONVERTER:

With a frequency converter, the speed on the pump be regulated as required.

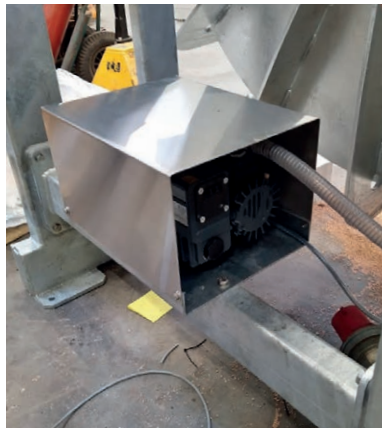
### PIPES, FITTINGS, ETC.:

We have extensive experience in supplying and advising customers regarding their choice of optimal pipe and fittings solutions.

### MOUNTING, INSTALLATION, ETC.:

One of the most important prerequisites for a well-functioning pump installation is the correct set-up and installation. If you would like help with this, we offer various solutions.

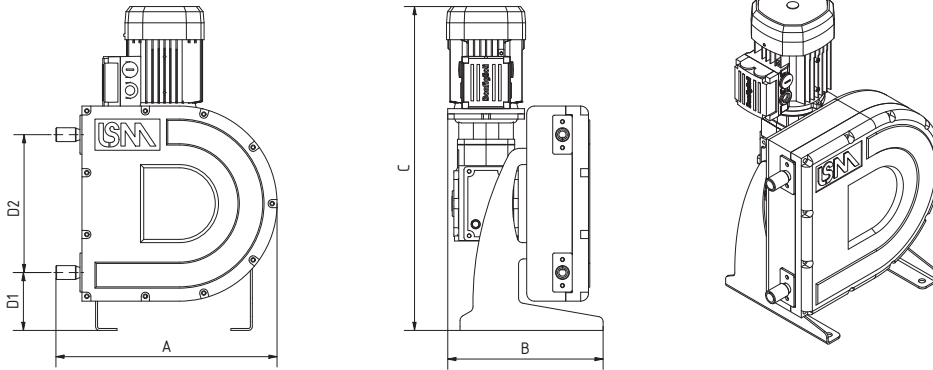




# DIMENSIONS OF LSM PUMP VARIANTS

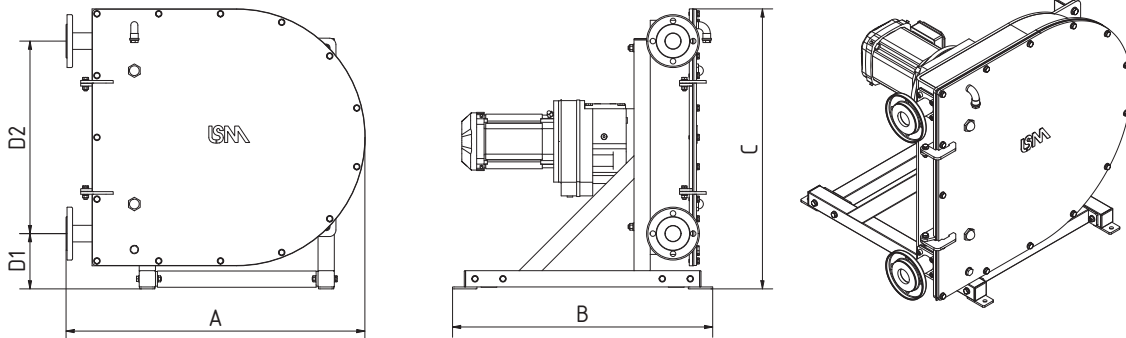
Model:	Size:	Measurement A:	Measurement B:	Measurement C:	D1:	D2:	Weight:	Motor:
LSM-10	1/4"	338 / 1'1 1/4"	270 / 10 5/8"	495 / 1'7 1/2"	89 / 3 1/2"	217 / 8 1/2"	25 kg	0.37 kW
LSM-15	1/2"	340 / 1'1 3/8"	270 / 10 5/8"	495 / 1'7 1/2"	93 / 3 5/8"	208 / 8 1/4"	25 kg	0.37 kW

Design example:



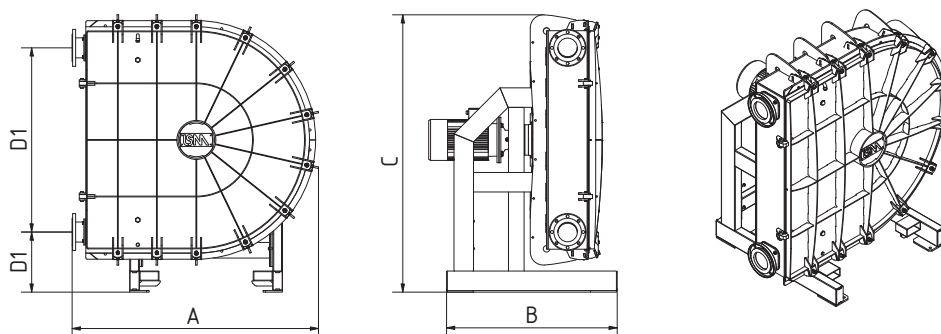
Model:	Size:	Measurement A:	Measurement B:	Measurement C:	D1:	D2:	Weight:	Motor:
LSM-25	1"	510 / 1'8 1/8"	543 / 1'9 3/8"	543 / 1'9 3/8"	137 / 5 3/8"	336 / 1'1 1/4"	65 kg	0.37 kW
LSM-32	1 1/4"	640 / 2'1 1/4"	543 / 1'9 3/8"	675 / 2'2 5/8"	162 / 6 3/8"	436 / 1'5 1/4"	105 kg	0.55 kW
LSM-40	1 1/2"	781 / 2'6 3/4"	720 / 2'4 3/8"	771 / 2'6 3/8"	160 / 6 1/4"	520 / 1'8 1/2"	140 kg	0.75 kW
LSM-50	2"	920 / 3' 1/4"	800 / 2'7 1/2"	860 / 2'9 1/8"	165 / 6 1/2"	594 / 1'11 3/8"	180 kg	1.5 kW
LSM-65	2 1/2"	1125 / 3'8 1/4"	1000 / 3'3 3/8"	1090 / 3'6 7/8"	220 / 8 5/8"	720 / 2'4 3/8"	265 kg	2.2 kW

Design example:



Model:	Size:	Measurement A:	Measurement B:	Measurement C:	D1:	D2:	Weight:	Motor:
LSM-80	3"	1230 / 4' 3/8"	1063 / 3'5 1/8"	1245 / 4'1"	235 / 9 1/4"	860 / 2'9 1/8"	500 kg	4.0 kW
LSM-100	4"	1520 / 4'11 3/4"	1156 / 3'9 1/2"	1642 / 5'4 5/8"	367 / 1'2 1/2"	1090 / 3'6 7/8"	700 kg	7.5 kW
LSM-125	5"	1743 / 5'8 5/8"	1455 / 4'9 1/4"	1816 / 5'11 1/2"	400 / 1'3 3/4"	1200 / 3'11 1/4"	1300 kg	11 kW
LSM-150	6"	1895 / 6'2"	1590 / 5'2"	2132 / 6'11"	461 / 1'6 1/4"	1420 / 4'7"	1800 kg	15/18 kW
LSM-200	8"	2744 / 9'	1944 / 6'4 1/2"	2909 / 9'6 1/2"	527 / 1'8 3/4"	1970 / 6'5 1/2"	4500 kg	37/45 kW
LSM-300 <b>NEWS</b>	12"	7135 / 23'4"	2210 / 7'3"	2070 / 6'9"	500 / 1'7 5/8"	-	8900 kg	55 kW

Design example:



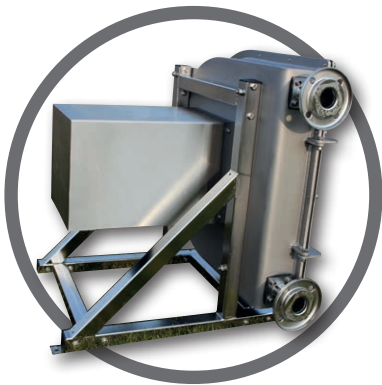
The respective measurements (A, B, C, D1 and D2) are indicated in mm/inches. Deviations of the dimensions can occur.

## TECHNICAL DATA

	LSM10	LSM15	LSM25	LSM32	LSM40	LSM50
Flow	150 l/h – 0.7 gpm	330 l/h – 1.5 gpm	1 m <sup>3</sup> /h – 4.5 gpm	2 m <sup>3</sup> /h – 9 gpm	3 m <sup>3</sup> /h – 13 gpm	6 m <sup>3</sup> /h – 26.5 gpm
Revolutions	50 rpm	50 rpm	26 rmp	26 rmp	26 rmp.	26 rmp
Max preassure	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi

	LSM65	LSM80	LSM100	LSM125	LSM150	LSM200
Flow	12 m <sup>3</sup> /h – 53 gpm	20 m <sup>3</sup> /h – 88 gpm	40 m <sup>3</sup> /h – 176 gpm	60 m <sup>3</sup> /h – 264 gpm	120 m <sup>3</sup> /h – 528 gpm	300 m <sup>3</sup> /h – 1321 gpm
Revolutions	26 rmp	26 rmp	26 rmp	26 rmp	26 rmp	26 omdr./min
Max preassure	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi	5 bar/72,5 psi

The technical specifications referred to in the table are based on our standard installations.  
It is possible to vary the required flow by changing the revolutions.



## THE WORLD'S LARGEST

LSM Pumps have developed the world's largest models within hose pumps. The large hose pumps can be used in several different industries, as they are suitable for pumping viscous fluids or large particles.

The LSM-200 model is the world's largest hose pump. It has been implemented with great success in the fishing industry, where it is used to transfer fish from fishing vessels. The pump can transfer fish up to a certain size, without damage and is at the same time extremely reliable.

LSM-300 NEW linear hose pump. Developed primarily for transport of fish farming and transport of larger live fish in the land-based Aquaculture facilities.



## STAINLESS LSM PUMP FOR THE FOOD INDUSTRY

As the only manufacturer in the world, we also offer pumps made of stainless steel, which, by default are designed for food manufacturers and their suppliers. However, we will gladly deliver to other industries if this need arises. The stainless steel version of the LSM pump possesses the same benefits as the corresponding LSM pump made of steel.

LSM Pumps offers various surface treatments for pumps in stainless steel. The various processes provide special properties and surface finishes. These treatments are of great importance for both quick and efficient cleaning as well as for service life and resistance to corrosion.



## ABOUT LSM

LSM is a Danish owned company and has existed since 1982. Today, the company is one of the major players within hose pumps.

As a manufacturer of hose pumps, we possess thorough knowledge of our product, and we will gladly offer suggestions for improvements and alternative solutions for your industry.

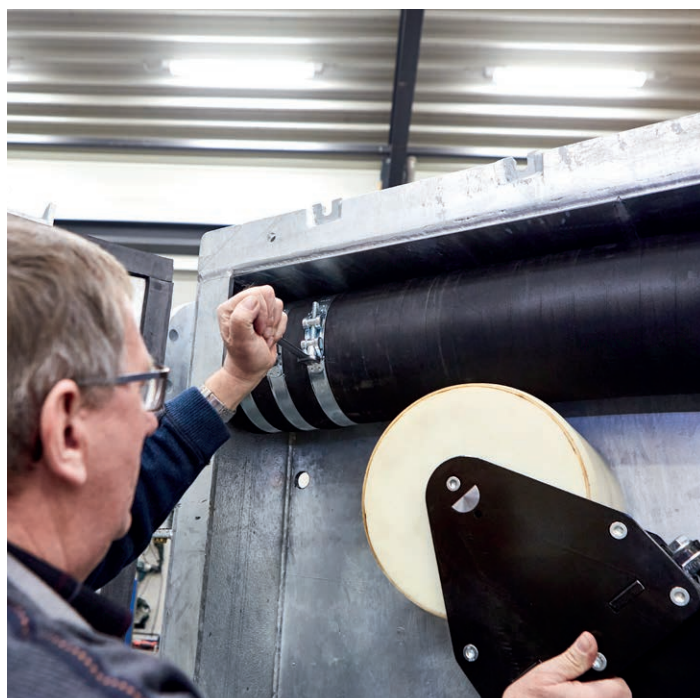
Our philosophy is to be close to our customers and ensure high quality and on-site service. In 2012, we opened a German department, LSM Pumpen GmbH, and in 2015, we opened a new department, LSM Pumps in Houston, USA. In addition, we have a very well-developed distribution network with a large number of dealers and agents, who cover a great part of the world.

## WHO WE ARE

LSM Pumps has always been synonymous with high quality and good service. We do not compromise on our values, and this is appreciated by our customers.

The Director and founder, Leo Sørensen, has vast experience in the pump industry, and is still working and advising our customers.

If you are considering acquiring a pump to manage your fluid needs, you should contact us. We have many years of experience in supplying and servicing pumps for various applications, and we will gladly make our expertise available to you to help you find the best solution at the right price.



**LSM PUMPER APS**

Sigenvvej 40  
DK-9760 Vraa · Danmark

## Contact:

Leo Sørensen  
Tel.: +45 9898 1900  
Mail: leo@lsm.dk

Jørgen Rasmussen

Tel.: +45 3168 8862 / +49 (0) 1520 4676166

Mail: jr@lsm.dk / jr@lsmumpen.de

[www.lsm.dk](http://www.lsm.dk)

**LSM PUMPS USA INC.**

11050 Mahaffey Road, Suite 360  
Tomball, Texas 77375

## Contact:

Dan Christoffersen  
Tel.: +1 281 - 771 8045  
Mail: dan@lsmumps.com

Juan Maturano Fernàndez

Mobile : +1 832 836 7118

Mail.: Juan@lsmumps.com

[www.lsmumps.com](http://www.lsmumps.com)

**LSM PUMPEN GMBH**

Graf-Zeppelin-Str. 22  
D-24941 Flensburg · Deutschland

## Kontakt:

Jørgen Rasmussen  
Tel.: +45 3168 8862 / +49 (0) 1520 4676166  
Mail: jr@lsm.dk / jr@lsmumpen.de

Richard Schaar

Mobile: +49(0) 162 163 0918

Mail.: Schaar@lsmumpen.de

[www.lsmumpen.de](http://www.lsmumpen.de)



**GLOBALLY  
REPRESENTED**

# LSM PUMPS