

# Vacuum pump

LEMA, LEMB

LEMD

<b>Capacity</b> 3-58 m <sup>3</sup> /h	<b>Pressure range</b> 33-1013 mbar	<b>Material</b> Cast iron & Stainless steel
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## Description

A one stage liquid ring vacuum pump in OEM construction.  
A close coupled pump where the motor is mounted directly on the pump casing to take up as little space as possible when the pump is mounted in the system.



AT 6300

## Range of application

Evacuation and pumping of dry gases and saturated steam.  
Typical industries are chemistry, pharmaceutical, food, plastic and rubber industry.  
Vacuum is used for distillation, drying, degassing, filling and boiling.

## Design

The pump works according to the liquid ring principle. Liquid ring pumps are in some regards related with displacement pumps since the pump wheel is eccentrically located in the round pump body. When the wheel is rotating a fluid ring is created along the pump body's inner wall. In the cells (the space between the pump body's wings) inside the fluid ring rising part volumes (intake) and then decreasing volumes (outlet) will be created under one rotation.

## Product key (example LEMD 27 AZ D52 OE 1 1A)

Pos	Beskrivning	Kod	Förklaring
1-3	Pump model	LEM	Liquid ring vacuum pump
4	Construction	D	
5-7	Pump size	27-427	
8	Hydraulic	A,B	Treaded inlet / outlet
		C,D	Flanged inlet / outlet
9	Bearing	Z	Motor bearing
10-12	Mechanical seal	D52	Mechanical seal Flowserve BVPFF
		D4W	Mechanical seal Flowserve BQ2PFF
		D5N	Mechanical seal Flowserve BVVGG
		D4J	Mechanical seal Flowserve BQ2VGG
		AFJ	Mechanical seal
13-14	Material	0F	See table
		0E	See table
		VP	See table
		VF	See table
15	Packning	1	Packing
16-17	Motor data	AA, AB	Depending on motor size

## Material combinations

Pos	0F	0E	VP	VA
Vacuum casing	0.6025 cast iron	0.6025 cast iron	1.4408 acid-proof steel	1.4408 acid-proof steel
Cover	0.6025 cast iron	0.6025 cast iron	1.4408 acid-proof steel	1.4408 acid-proof steel
Guide disc	1.4404 acid-proof steel	1.4404 acid-proof steel	1.4404 acid-proof steel	1.4404 acid-proof steel
Impeller	POM polymer	1.4408 acid-proof steel	POM polymer	1.4408 acid-proof steel
Valve ball	PTFE	PTFE	PTFE	PTFE

## Service fluid in m<sup>3</sup>/h

Pressure in mbar	33	120	200	400
LEM 27&52	0,45	0,41	0,38	0,32
LEM 92&127	0,60	0,53	0,48	0,41
LEM 162	1,20	1,10	1,00	0,90
LEM 252	1,30	1,10	1,00	0,90
LEM 327&427	1,80	1,40	1,30	1,10
	Total service liquid in installation where service liquid transported to drain			