

Dolphin

Liquid Ring Vacuum Pumps LM 0530/0800 A



- › **Robust:**
proven technology, high vapor and particle tolerance
- › **Compact:**
directly flange mounted motor, no base frame required, integrated flow channel
- › **Flexible:**
application-oriented, operating fluids other than water are possible, ATEX certified version available (Cat. 1 (i) IIB, T4), corrosion-free stainless steel impeller, choice of cast iron (EN-GJL-200) or 316 grade stainless steel material housings

Dolphin LM is the new generation of liquid ring vacuum pumps from Busch, with all the advantages of proven technology plus additional refinements.

Dolphin LMs are single-stage vacuum pumps for rough vacuum applications from atmospheric pressure to 100 Torr ultimate pressure. The Dolphin LM series is available in a total of five sizes, allowing an exact match to every process.

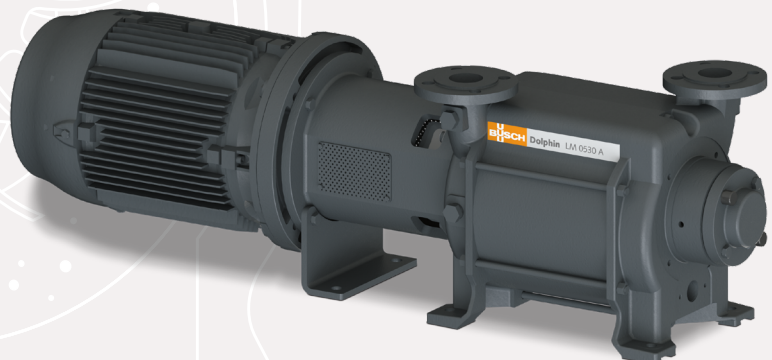
The operating fluid is usually water, but other liquids may be used if required by the process conditions. Dolphin LM liquid ring vacuum pumps may be operated as a simple continuous flow system, or as a partial or total recirculation system.

The precisely dimensioned range of sizes, extensive range of accessories and choice of construction materials allow these vacuum pumps to be perfectly adapted to many different industrial processes.

Dolphin LM technology uses the proven liquid ring principle, with contact-free internal components and virtually isothermal compression.

The LM series has been developed for continuous operation to support a wide range of processes in many industrial sectors, including the chemical and pharmaceutical industries.

**Dolphin LM –
robust principle,
modern design.**



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Liquid Ring Vacuum Pumps

LM 0530/0800 A



Technical specifications

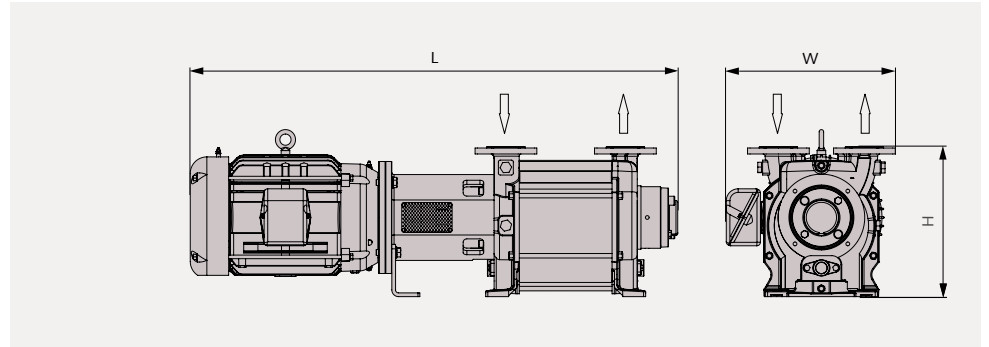
The Dolphin LM is a series of single-stage liquid ring vacuum pumps. An eccentrically mounted impeller rotates in a housing partially filled with operating fluid. The impeller blades dip into the fluid, and the centrifugal force exerted by their rotation forms a so-called liquid ring within the housing. The pumped medium is transported in the spaces between the blades and the liquid ring. The eccentric rotation of the impeller alters the volume of these spaces, causing gas to be drawn in, compressed and expelled. Operation as a compressor is possible up to 22 PSIG.

Dolphin LM 0530/0800 A are the two largest vacuum pumps in a series that comes in a total of five sizes.

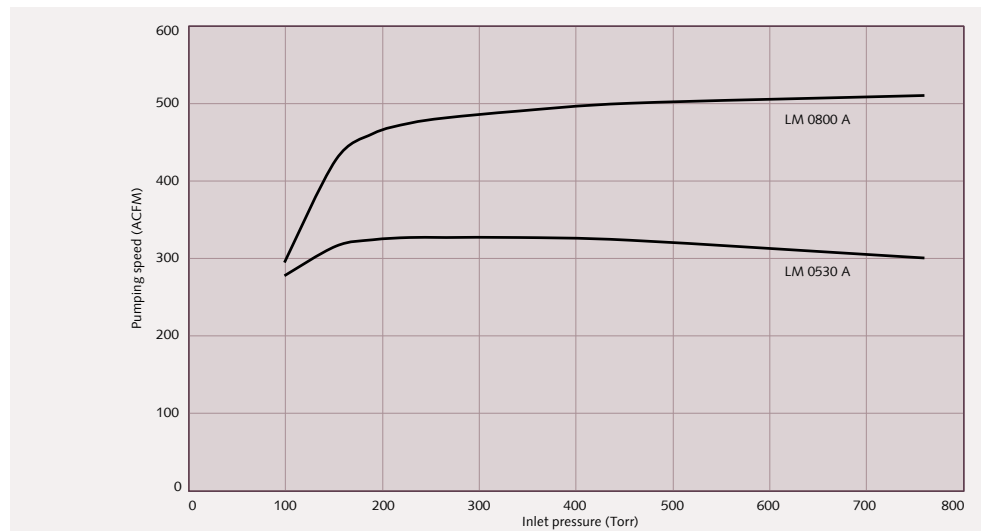
Accessories / Technical options

- Modular pumpsets, configured for partial or total recirculation of the operating fluid
- Liquid separator
- Cavitation protection
- Heat exchanger
- Gas ejector
- Wide selection of motors
- Non-return valves
- Vacuum relief valves

Dolphin LM 0530/0800 A



Pumping speed Air at 70 °F. Tolerance: ± 10%



Technical data		LM 0530 A	LM 0800 A
Max. pumping speed	ACFM	327	510
Ultimate pressure	Torr	100	100
Max. pressure	PSIG	22	22
Nominal motor rating	HP	15	30
Nominal motor speed	RPM	1800	1800
Sound level (ISO 2151)	dB(A)	73	76
Approximate weight	Lbs.	722	924
Dimensions (L x W x H)	inches	51 1/4 x 17 13/16 x 15 13/16	59 11/16 x 21 1/2 x 17 11/16
Gas inlet Gas outlet		DN 50 PN 10 / ANSI 2" 150 lbs / JIS 50 10K DN 50 PN 10 / ANSI 2" 150 lbs / JIS 50 10K	DN 65 PN 10 / ANSI 2 1/2" 150 lbs / JIS 65 10K DN 65 PN 10 / ANSI 2 1/2" 150 lbs / JIS 65 10K

All performance data is based on ambient conditions of 14.7 PSIA and 70 °F, and has a tolerance of ± 10%.

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Technical data is subject to change. Created in Germany. MG PL DOLPHINLM05300800A USenus 01/2018 8Aa