Vacuum pump
LEM, LEL

LEM/LEL 251

Capacity	Pressure range	Material
100-280 m³/h	33-1013 mbar	Cast iron & Stainless steel

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

AT 6300

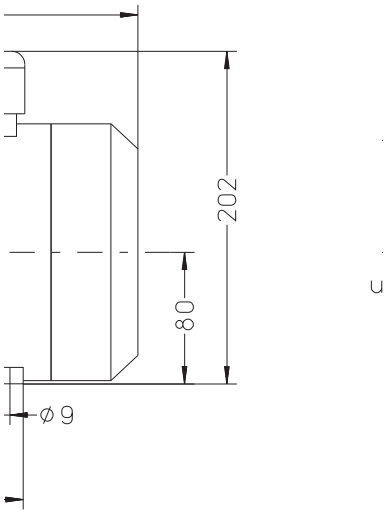
Range of application
Evacuation and pumping of dry gases and saturated steam.
Typical industries are chemistry, pharmaceutical, food, plastic and rubber industry.
Vacuum is used for distillation, drying, degassing, filling and boiling.

Design
The pump works according to the liquid ring principle. Fluid 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 LEMA 26 AZ AA1 4B 7 1A)

Pos	Description	Code	Explanation
1-3	Pump model	LEM	Liquid ring vacuum pump
4	Construction	A,B	
5-7	Pumps size	25-425	
8	Hydraulics	A,8	Threaded inlet/outlet
		C,9	Flanged inlet/outlet
9	Bearings	Z	Motor bearings
10-12	Sealing	AAE	Mechanical sealing SIHI FN EBPGG
		AA1	Mechanical sealing SIHI FN GBVGG
13-14	Material	0A	See table below
		0K	See table below
		4B	See table below
15	Gasket	0	Fluid ring
		7	O-ring Teflon
16-17	Motor data	1A,1B, KW	Depending on motor size

Only the most common combinations above, for specials contact Armatec



Material combinations

Pos	0K	4B
Vacuum casing	0.6025 Cast iron	1.4408 Acid-proof steel
Cover	1.4301 Stainless steel	1.4404 Acid-proof steel
Guide disc	1.4301 Stainless steel	1.4404 Acid-proof steel
Shaft	1.4021 Stainless steel	1.4571 Acid-proof steel
Valve plate	PTFE	PTFE
Impeller	1.4308 Stainless steel	1.4571 Acid-proof steel

Connections

Connection	Designation 251
UB	Service fluid G 1/2
Ue	Drainage G 1/2
Uc	Cavitation protection G 1/4
Um	Pressure sensor G 1/2

Service fluid in m³/h

Pressure in mbar	33	120	200	400
LEM 251	1,4	1,3	1,15	0,95

Total service fluid by installation where the fluid is directed straight in to the drain.
For other installations ask Armatec