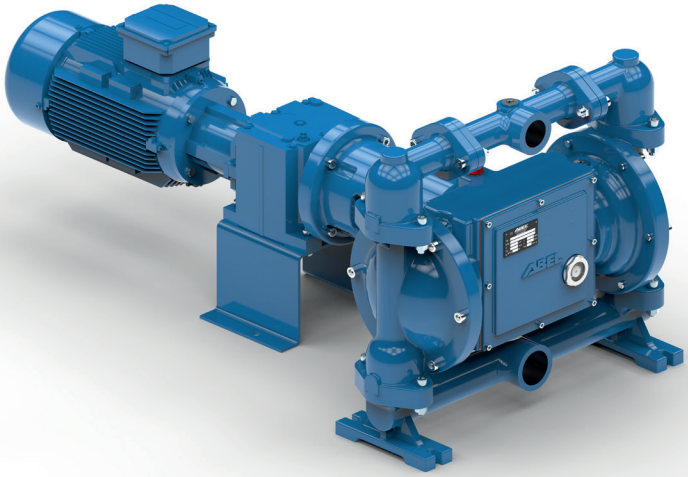
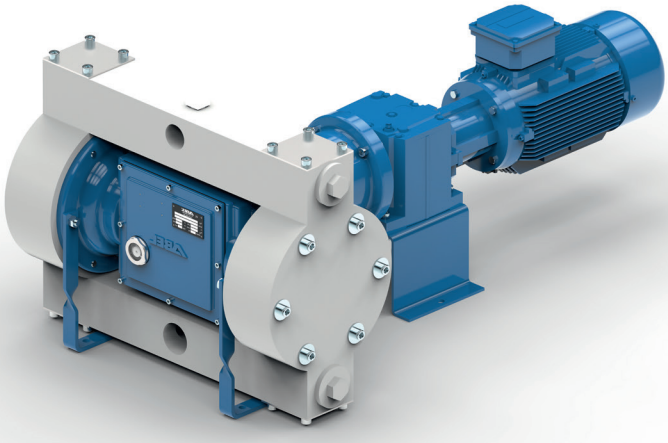
ABEL®
Pump Technology

ABEL EM

Electric Diaphragm Pump

The economical Standard





Diaphragm Pumps
Solids Handling Pumps
High Pressure Pumps
Marine Pumps

www.abelpumps.com

EM - Electric Diaphragm Pumps

Overview Pump Series

The ABEL EM electric diaphragm pump is a double-acting pump of robust construction. The pump series is a powerful alternative to conventional pump systems - especially in **low-pressure applications.**



Key Features

- **Perfect for low-pressure applications**
- **Highly energy efficient**
- **Available as nodular cast iron (SG), stainless steel (ED) or polypropylene (PP)**
- **Diaphragms, balls, valves in different materials available to meet specific requirements**

Applications

- Sludge/fluid transfer
- Filter press feed
- Rotary kiln feed

Industries

- Water/Wastewater
- Chemical industry incl. Paint/Coatings
- Ceramics
- Power
- Oil, Gas, Refineries
- Pulp & paper

Products being pumped

- Sludge/ Slurries
- Chemicals
- Wastewater
- Suspensions

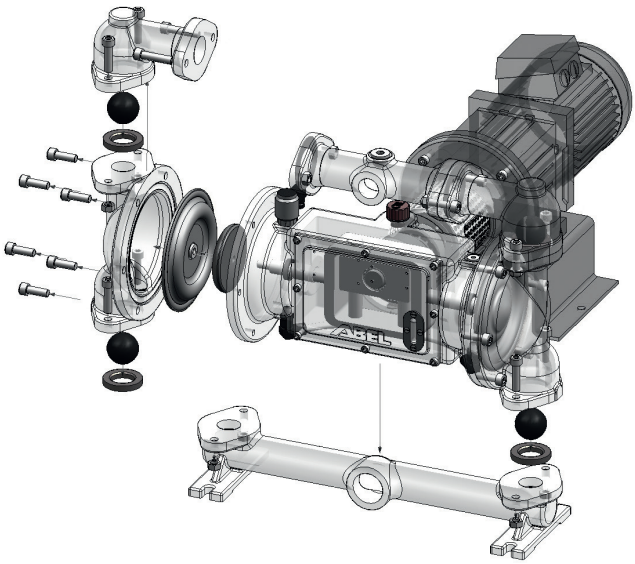
Fluids to be pumped may be viscous, contain solids, be aggressive, and/or corrosive.

Design

The EM series pumps feature seal-less, dry-running, low shear, versatile pumping performance. The integral metal core of each diaphragm is completely covered by the diaphragm material on its fluid pumping side, minimizing the possibility of fluid contamination.

The smooth mechanically controlled linear drive of the diaphragms ensures low shear, seal-less, positive displacement performance with controlled transfer rates through variable viscosity and system pressure changes.

Maximum discharge pressure can be limited by an external electrical control device, such as, a pressure switch or contact making pressure gauge when required for additional protection.

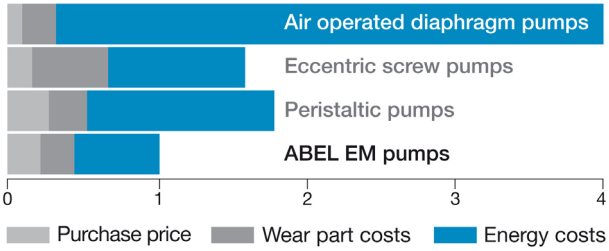


Efficient. Reliable. Economic.

Low Overall Cost

Unlike other pumps, the ABEL EM operates **without compressed air** or hydraulic fluid, making it highly energy-efficient and low-maintenance.

This results in particularly low overall costs. The use of conventional pumps in low pressure applications often incurs high operating costs. Purchase cost is only a fraction of the total life cycle cost of a pump.



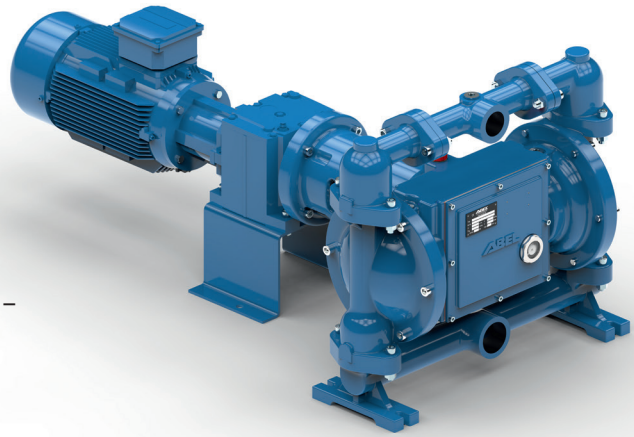
The EM Difference

Smart Choice for Low-Pressure Applications

Robust design

Smooth product transfer

Variable flow rate



Highly efficient electric drive

Low operating costs

Proven performance – trusted worldwide

High reliability - safe against dry running

Constant flow rates against variable pressure and viscosity

EM Accessories

- Pulsation dampener
- Suction stabilizer
- Pressure monitoring devices
- Variable frequency drives (VFD)

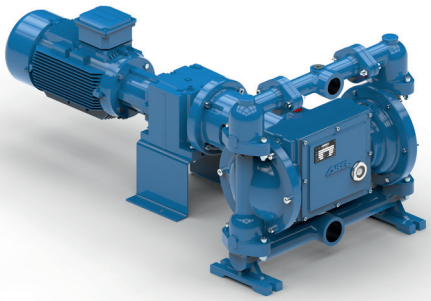
The compact design of the EM can be customized with a wide range of materials for diaphragms, balls and valve seats to meet the demands of various industries and applications.

With its innovative design and outstanding efficiency, the ABEL EM has earned its place as a global leader in its class.

EM - Electric Diaphragm Pumps

EM Metal Design

up to 40 m³/h (175 GPM);
0.8 MPa (116 psi)

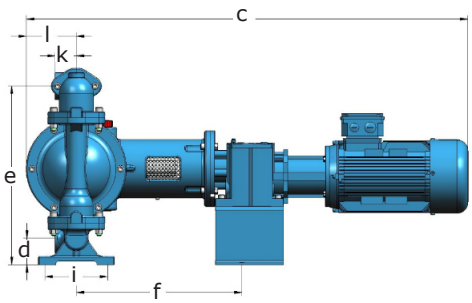


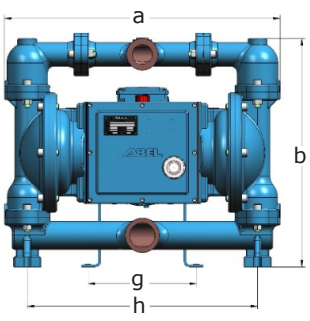
ABEL EM Pumps are available in an explosion-proof (ATEX) design

The Electric Diaphragm Pumps of the EM series are available with ATEX certification for the equipment group II, categories 2 and 3.

We have paid particular attention to the potentially different zones on the inside and on the outside of the pump. Depending on the application and the place of installation, it is possible that the inside of the pump exhibits an Ex zone that differs from the respective place of installation.

ABEL-EM	Model	15	25	40	50	80
Flow	max. [m³/h]	1,25*	5*	10*	18*	40
Stroke rate	max. [1/min]	150	120	110	100	80
Motor size	max. [kW]	0,37	1,5	3,0	5,5	7,5
Suction connection		G ¾"	G 1 ½"	G 2"	DN 80	DN 100
Discharge connection		G ½"	G 1"	G 1 ½"	DN 50	DN 80
	a	360	540	610	840	1245
	b	260	400	520	779	956
	c	700	1000	1170	1360	1700
	d	24	43	70	115	116
	e	230	360	470	696	861
	f	280	410	440	585	775
	g	175	280	240	330	450
	h	300	450	510	645	985
	i	80	135	165	260	210
	k	30	40	56	100	125
	l	68	108	133	168	220
	Weight approx [kg]	35	120	160	365	875

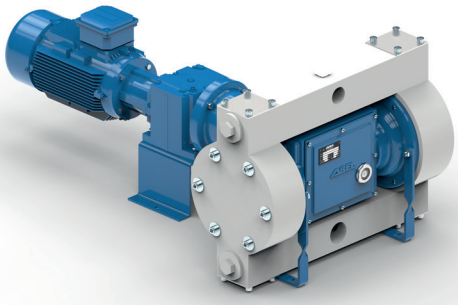




* approx. 50% with PTFE diaphragms

EM Polypropylene Design

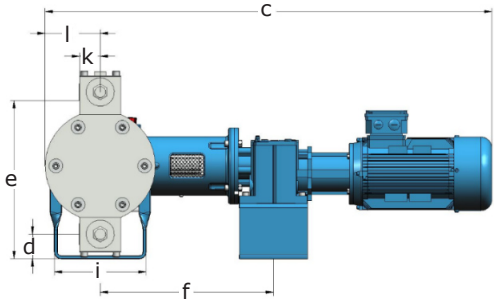
up to 18 m³/h (79 GPM);
0.8 MPa (116 psi)

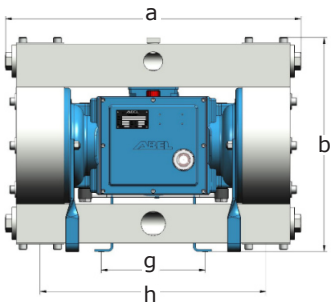


ABEL EM Pumps are available in an explosion-proof (ATEX) design

In the chemical industry and in other areas of process technology aggressive media require the use of highquality plastics such as polypropylene (PP) and explosion proof motors.

ABEL-EM	Model	15	25	40	50
Flow	max. [m³/h]	1,25*	5*	10*	18*
Stroke rate	max. [1/min]	150	120	110	100
Motor size	max. [kW]	0,37	1,5	3,0	5,5
Suction connection		G ¾"	G 1 ½"	G 2"	G 3"/G 2"
Discharge connection		G ½"	G 1"	G 1 ½"	G 3"/G 2"
	a	410	600	680	890
	b	270	400	495	764
	c	710	1010	1190	1400
	d	41	55	65	125
	e	240	360	440	675
	f	280	408	460	585
	g	175	280	240	330
	h	300	460	520	645
	i	60	190	243	300
	k	30	48	55	73
	l	80	120	146	211
	Weight approx [kg]	40	110	140	330





* approx. 50% with PTFE diaphragms

ABEL®
Pump Technology

The pumping solution for your industry:

- Mining
- Water and Wastewater
- Ceramics
- Chemical
- Oil and Gas
- Energy Industry
- Corrugated Board
- Paint and Varnish
- Petrochemical

Diaphragm Pumps
Solids Handling Pumps
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Marine Pumps

United States and Canada

ABEL Pumps, L.P.
+1 (412) 741 3222
abelpumpsus@idexcorp.com

Spain, Portugal, Africa
Latin America, Australia

ABEL Equipos S.A.
+34 (91) 715 4848
aeq-mail@idexcorp.com

ABEL GmbH
Abel-Twiete 1
21514 Büchen
Germany

Phone: +49 4155 818 0
E-Mail: abel-mail@idexcorp.com
Website: www.abelpumps.com

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