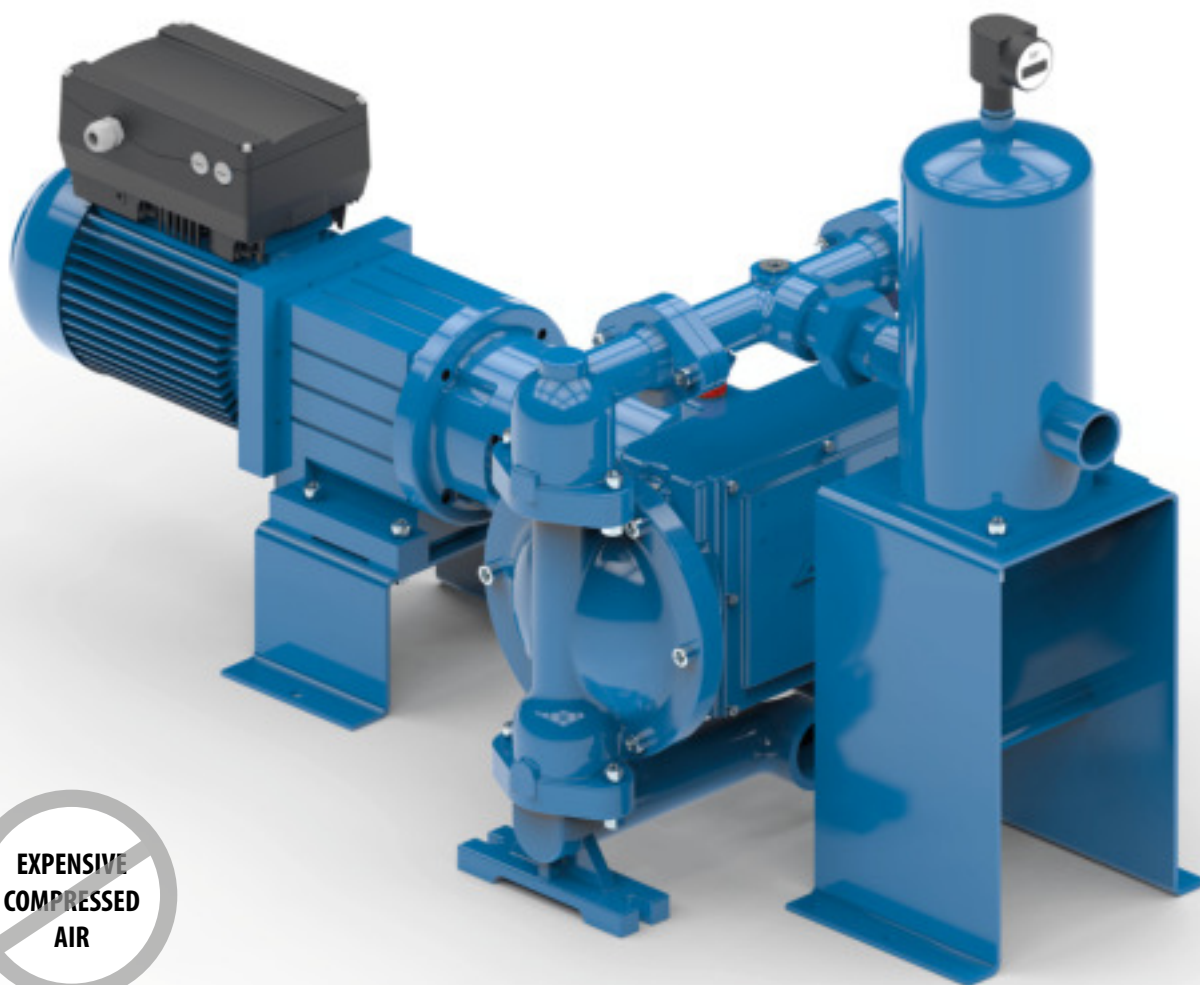


Goodbye compressed air

ABEL EM pump with nil-flow control system

The new efficiency benchmark

Now with pressure-dependent stop-start control



Efficiency driven by intelligence

Pumping entirely without compressed air: Save money while maintaining controlability

The best in pump efficiency

The ABEL EM nil-flow electric diaphragm pump is the go-to, energy efficient choice for difficult and abrasive duty. No air, no rotors, no clogging, no worries.

Energy and maintenance savings are immediate, often paying back your initial investment within months.

Shut a valve on the discharge of any other electric pump and something is bound to break. The ABEL EM with the nil-flow control system automatically allows the pump to stop under pressure, rendering so-called electric air charged diaphragm pumps obsolete.

Go electric for controllability

Air operated pumps slow down and eventually stall upon rising pressure. The ABEL EM with nil-flow control system maintains constant flow regardless of back pressure and can be controlled by the VFD. Flow can be varied or even safely stopped via an internal reference signal, regardless if the pressure spike is gradual or abrupt.

Controlled pressure at constant flowrate

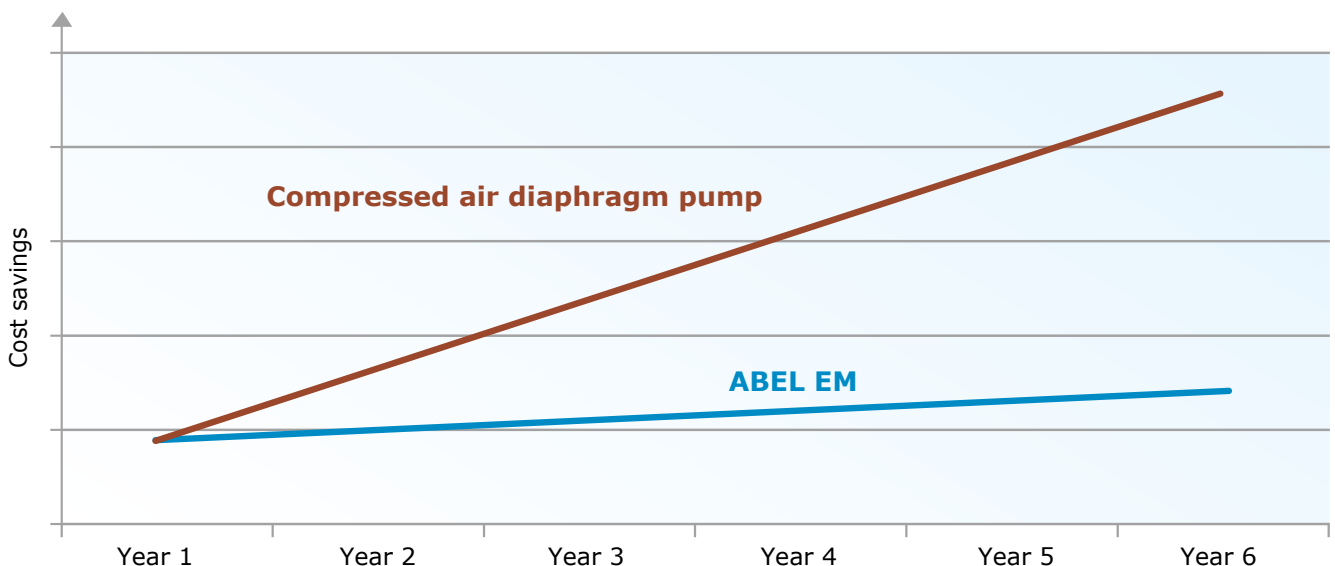
A constant flowrate can be achieved up to 60 psi. The pressure limit and restart can be set individually by the plant operator. You are in complete control. You can't get that from your air operated pump.

5 times more efficient than air operated diaphragm pumps

Thanks to ABEL EM smart technology together with its highly efficient drive design, cost efficiency is up to 5 times greater than air operated pumps. And unlike gear, lobe and progressing cavity type pumps, ABEL EM pumps can't slip. No more expensive rotor/stator repair, no more inefficient flow.

ABEL EM flexibility permits controlled opening and closing of the discharge line allowing several tanks at different locations to be filled easily and at a constant flow rate.

Example of cost savings (acquisition costs included)



Examples of applications for the ABEL EM with nil-flow control system



Paint and varnish industry



Chemicals industry



Petrochemicals industry

Advantages of the ABEL EM

- Clog-free and safe to run dry
- Self-priming
- High pumping pressures are possible
- Safe separation of the pumped medium from the pump mechanism
- Gentle transfer (low shear)
- Energy-efficient conveying
- Reliable overload protection

ABEL EM with nil-flow control system vs. other pump technologies

Technology \ Feature	ABEL EM with nil-flow control system	Electric compressed air supported diaphragm pumps	Other electric type diaphragm pumps	Compressed air diaphragm pumps	Eccentric screw (progressive cavity type) pumps	Rotary piston pumps
Safe to run dry	x	x	x	x		
Self-priming	x	x	x	x	x	
Stable performance curve	x		x		x	x
Switches off when under pressure	x	x		x		
Energy-efficient drive	x	x	x		x	x
Works without compressed air	x		x		x	x

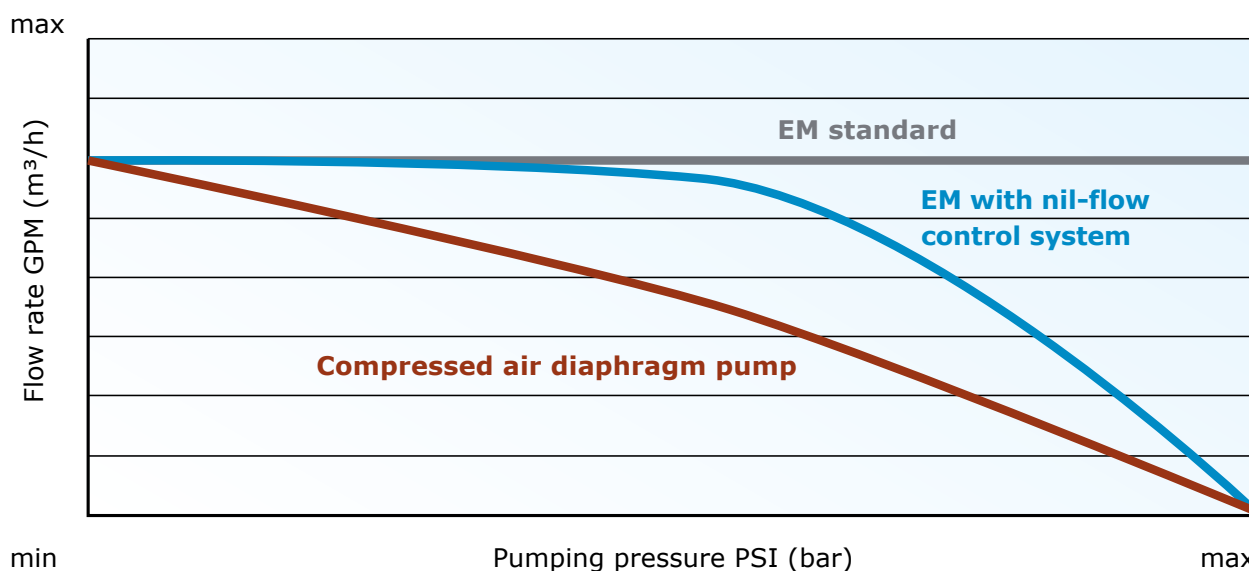
Housing and body materials

- Spheroidal-graphite cast iron (SG)
- Stainless steel (ED)
- Aluminium (AL) (contact ABEL for further information)
- Plastics (PP)

Diaphragm / ball and valve seat options

- NBR (Nitrile Butadiene Rubber)
- EPDM (ethylene propylene diene monomer rubber)
- PU (Polyurethane)
- FPM (fluoro rubber)
- PTFE (polytetrafluoroethylene)

Comparison of pump performance curves



The pumping solution for your industry:

- Mining
- Water and wastewater
- Ceramics
- Chemistry
- Oil and gas
- Energy industry
- Corrugated board
- Paint and varnish
- Petrochemical

Diaphragm Pumps
Solids Handling Pumps
High Pressure Pumps
Marine Pumps