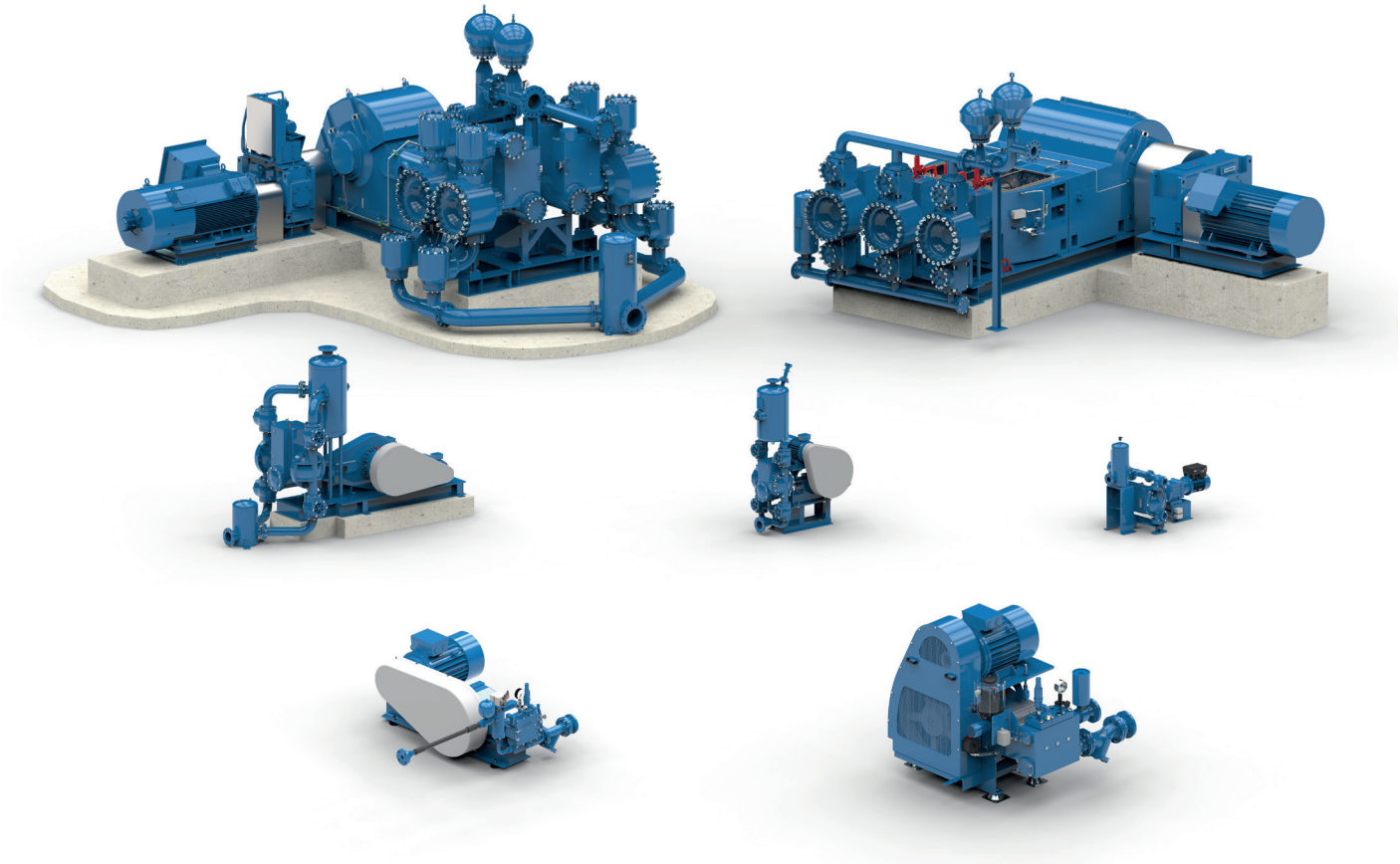
ABEL®
Pump Technology

## ABEL Pumps

# Product Overview

## We help you work with difficult Media



Diaphragm Pumps
Solids Handling Pumps
High Pressure Pumps
Marine Pumps

www.abelpumps.com

## Reciprocating Positive Displacement Pumps

- Electric Diaphragm Pumps
- Piston Diaphragm Pumps
- High Pressure Pumps

ABEL specializes in reciprocating positive displacement pumps for varying flow rates and pump pressures with the particular core competence in **diaphragm pumps suited for abrasive, aggressive and even shear-sensitive media**.

### WHY ABEL?

- More than 75 years of pump experience
- Highest quality standards
- Sustainably manufactured in Germany
- Certified according to DIN ISO 9001
- Excellent customer service (on-site repairs, trainings, commissioning, technical support, spare parts)

### INDUSTRIES WE SERVE

- Mining
- Waste water (industrial & municipal)
- Power
- Oil & Gas
- Chemical Industry
- Ceramics
- Cement
- Food, corrugated media, marine, ...




## AI powered Pumps & Predictive Maintenance

Sponsored by the German Federal Ministry of Education and Research

**Available for all ABEL**

**piston diaphragm pumps.**

AI powered pumps come with AI features for automatic error detection and prediction. An AI powered pump tell you automatically what it needs and when. The AI combined with an applied predictive maintenance approach **solves 99% of challenges** during pump operation and enables **predictive maintenance.**

### BENEFITS

- 24/7 AI powered operational analysis
- Monthly performance report
- Smart communication via mobile app
- Ability to run predictive maintenance
- Automated error detection and prediction of wear based failures

### WHY PREDICTIVE MAINTENANCE?

- Up to 25% reduction of operating costs
- Up to 50% longer maintenance cycles
- Improved maintenance planning
- Minimized unplanned downtimes
- Early detection of critical situations

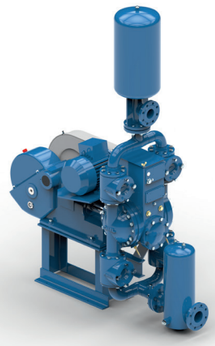


## CM/HM - Piston Diaphragm Pumps

## HM - Piston Diaphragm Pumps

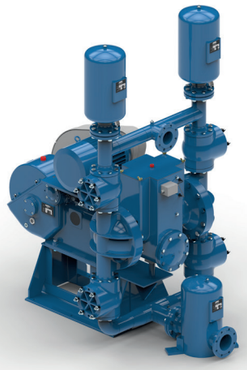
### Compact Diaphragm Pump CM

**up to 30 m³/h (130 GPM); 2.5 MPa (362 psi)**



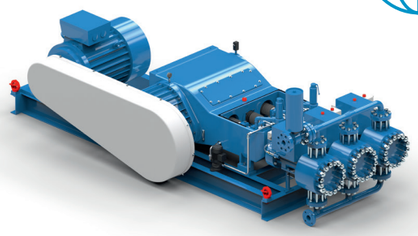
### Piston Diaphragm Pump HMD (Duplex)

**up to 90 m³/h (400 GPM); 10.0 MPa (1450 psi)**



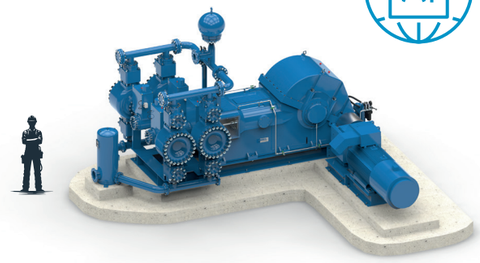
### Piston Diaphragm Pumps HMT (Triplex)

**up to 210 m³/h (925 GPM); 25.0 MPa (3625 psi)**



### Piston Diaphragm Pumps HMQ (Quadruplex)

**up to 410 m³/h (1850 GPM); 25.0 MPa (3625 psi)**



#### KEY FEATURES

- Double diaphragm
- Highly resistent to wear
- High degree of safety (double diaphragm)
- Automatic flow rate control in filter press feed applications without complex electronics

**Applications of CM pumps:**

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

ABEL CM & HMD are available in an explosion-proof (ATEX) design

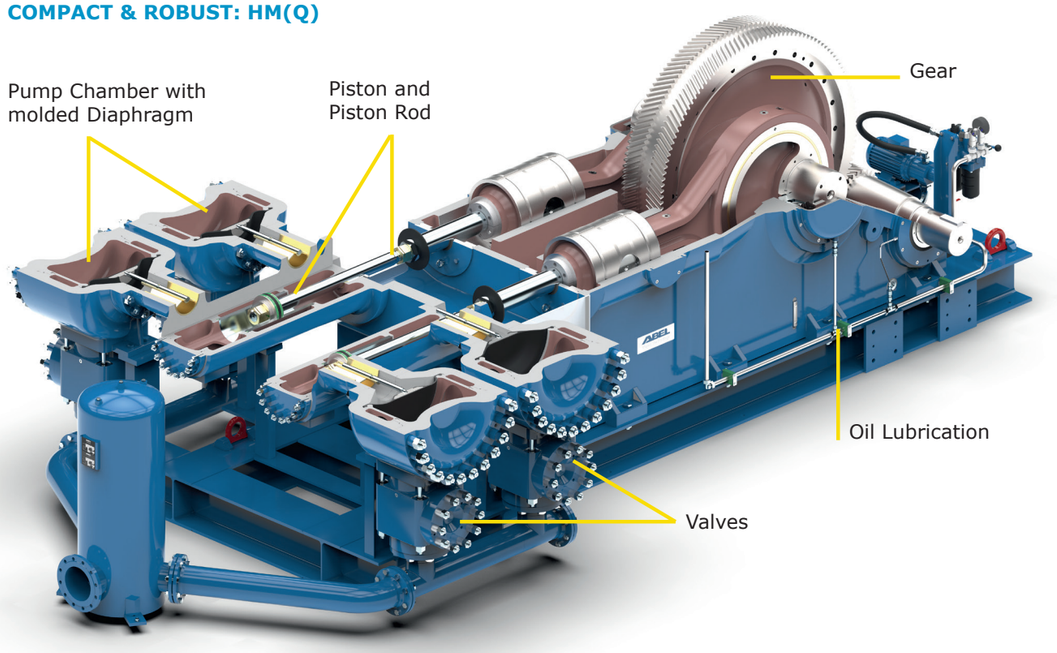
#### KEY FEATURES HM PUMP SERIES

- Pre-formed diaphragm
- Able to run dry
- Ideal for slurries with a high, mineral based content
- Perfectly for operations with increased flow rates and high operating pressures
- Low operating and maintenance costs
- Control valve monitors diaphragm position

**Applications of HM pumps:**

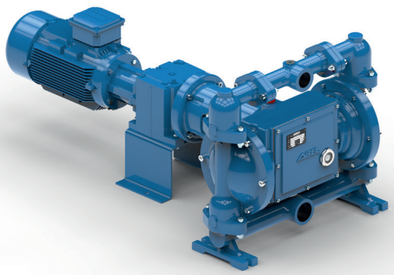
- Mine dewatering
- Mine backfilling
- Tailings/sludge/fluid transfer
- Filter press feed
- Rotary kiln feed
- Spray dryer feed
- Gland seal water supply
- Autoclave feed

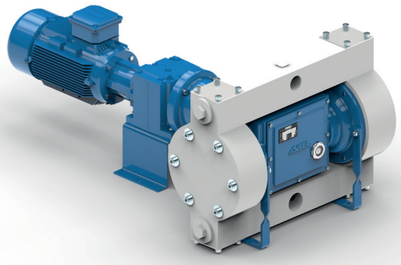
#### COMPACT & ROBUST: HM(Q)



## EM - Electric Diaphragm Pumps

| EM Metal Design | EM Plastic Design |
|---|---|
| up to 40 m³/h (175 GPM); 0.8 MPa (115 psi) | up to 20 m³/h (90 GPM); 0.8 MPa (115 psi) |



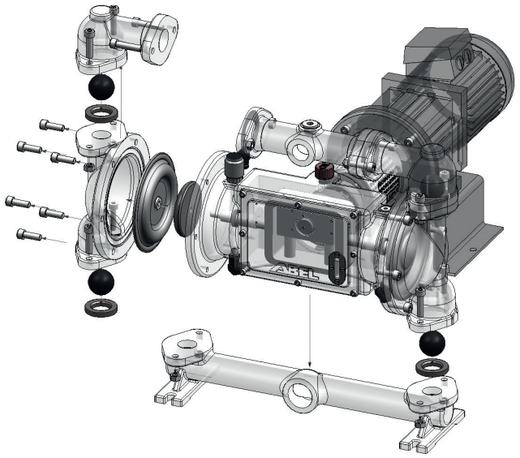


### KEY FEATURES

- Perfectly in 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 of EM pumps:**

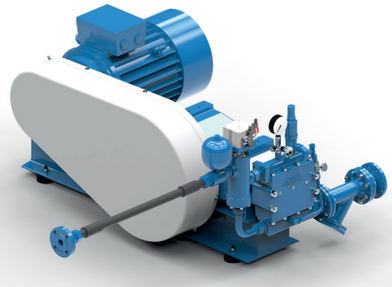
- Sludge/fluid transfer
- Filter press feed
- Rotary kiln feed

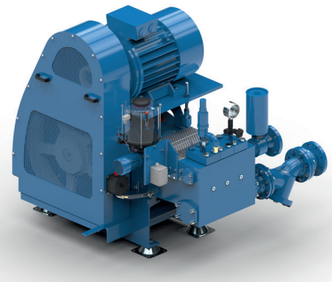


ABEL EM Pumps are available in an explosion-proof (ATEX) design

## HP/HPT - High Pressure Pumps

| HP High Pressure Pump | HPT High Pressure Pump |
|---|---|
| up to 28 m³/h (123 GPM); 16.0 MPa (2300 psi) | up to 50 m³/h (220 GPM); 25.0 MPa (3625 psi) |







Pneumatically actuated 32-way bypass valve for filter cloth wash pumps



HP - Plate valve in stainless steel/bronze

### KEY FEATURES

- Single-acting plunger pumps
- Robust construction
- Various accessories available (e.g. Sound control cabins)
- Plunger: Stainless steel ceramic-coated with NBR groove ring or stuffing box packing

**Applications of high pressure pumps:**

- Filter cloth cleaning
- Gland seal water
- Transfer
- Gas drying
- Tank cleaning
- Reverse osmosis
- Well injection

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

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
High Pressure Pumps
Marine Pumps


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