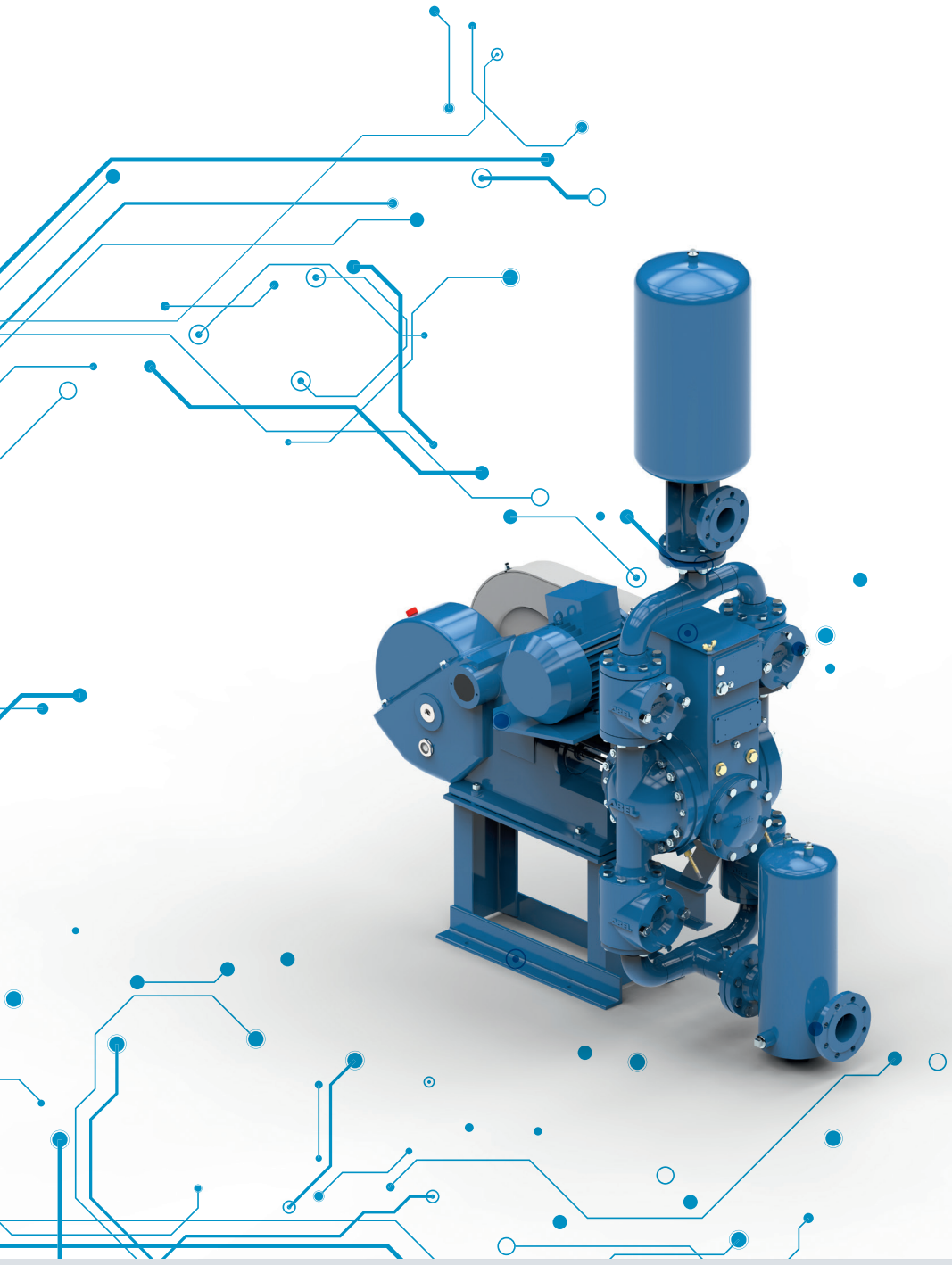
ABEL®
Pump Technology

ABEL CM

Compact Diaphragm Pump

The one with the double diaphragm



AI

Available with AI
pump monitoring

Diaphragm Pumps
Solids Handling Pumps
High Pressure Pumps
Marine Pumps

www.abelpumps.com

CM - Compact Diaphragm Pump

Pump Technology

ABEL CM piston diaphragm pumps are single or double-acting specialized pumps that are used for abrasive media.

They are highly resistant to wear, even when used at high pressures over an extended period of time.

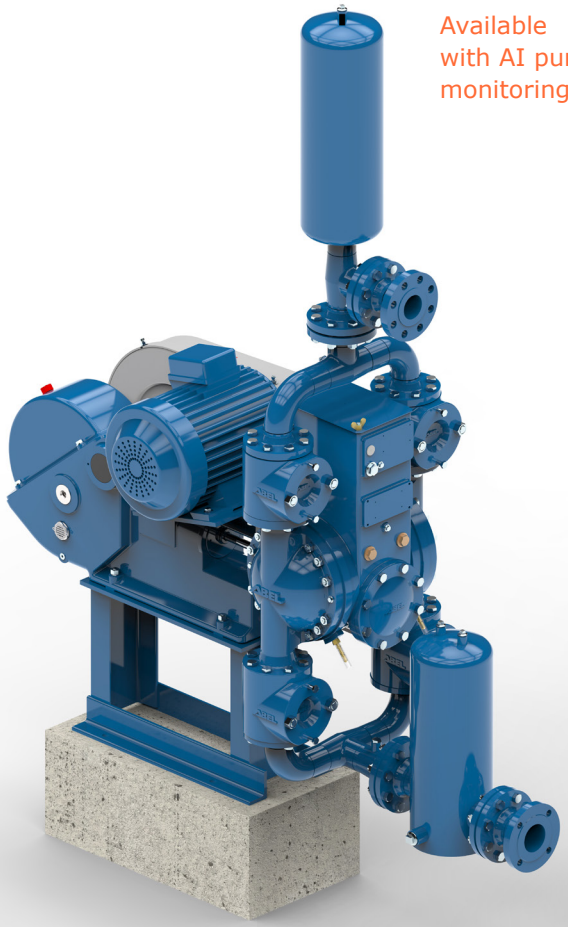
Their **double-diaphragm technology** offers a high degree of safety. In the event the product or hydraulic medium penetrates into the intermediate space of the double membrane, it is immediately detected by the integrated control function before the product gets into the hydraulic media or vice versa.

Technical Advantages

- Optimal design to withstand high pressures
- Double diaphragm
- Hermetically sealed
- Product side without gland packings
- Durable ball valves
- Valve housing with inspection openings
- Visual or electrical diaphragm control
- Safety valve and automatic liquid supplement in the primary circulation
- Automatic diaphragm position control
- Available in an explosion-proof (ATEX) design

Metal Design

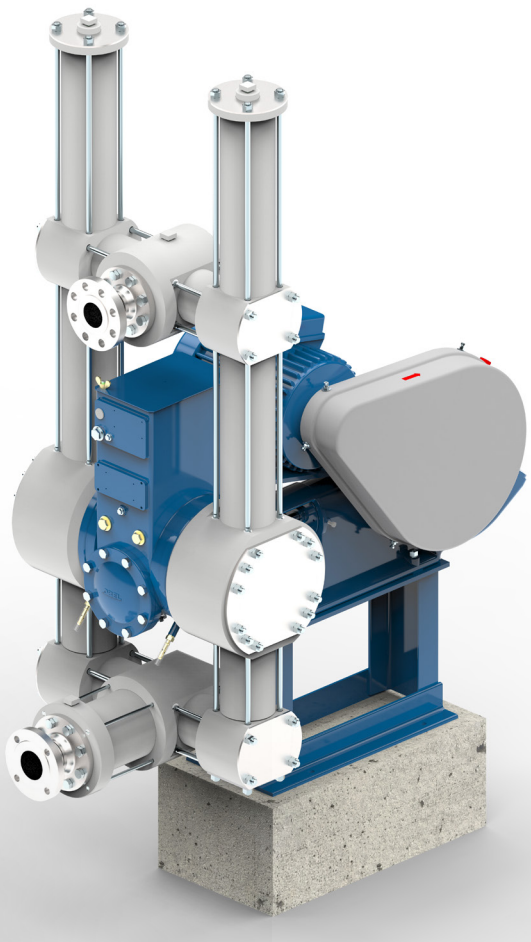
up to 30 m³/h (130 GPM);
up to 2.5 MPa (362 psi)



Available with AI pump monitoring

Polypropylene Design

up to 15 m³/h (65 GPM);
up to 1.6 MPa (232 psi)



CM - Compact Diaphragm Pump

Design & Materials

Housing Materials

- Nodular Cast Iron
- Stainless Steel
- Polypropylene
- Rubber-lined

Diaphragm Materials

- PU (Polyurethane)
- TPE
- FPM
- PTFE
- EPDM

Ball Valves

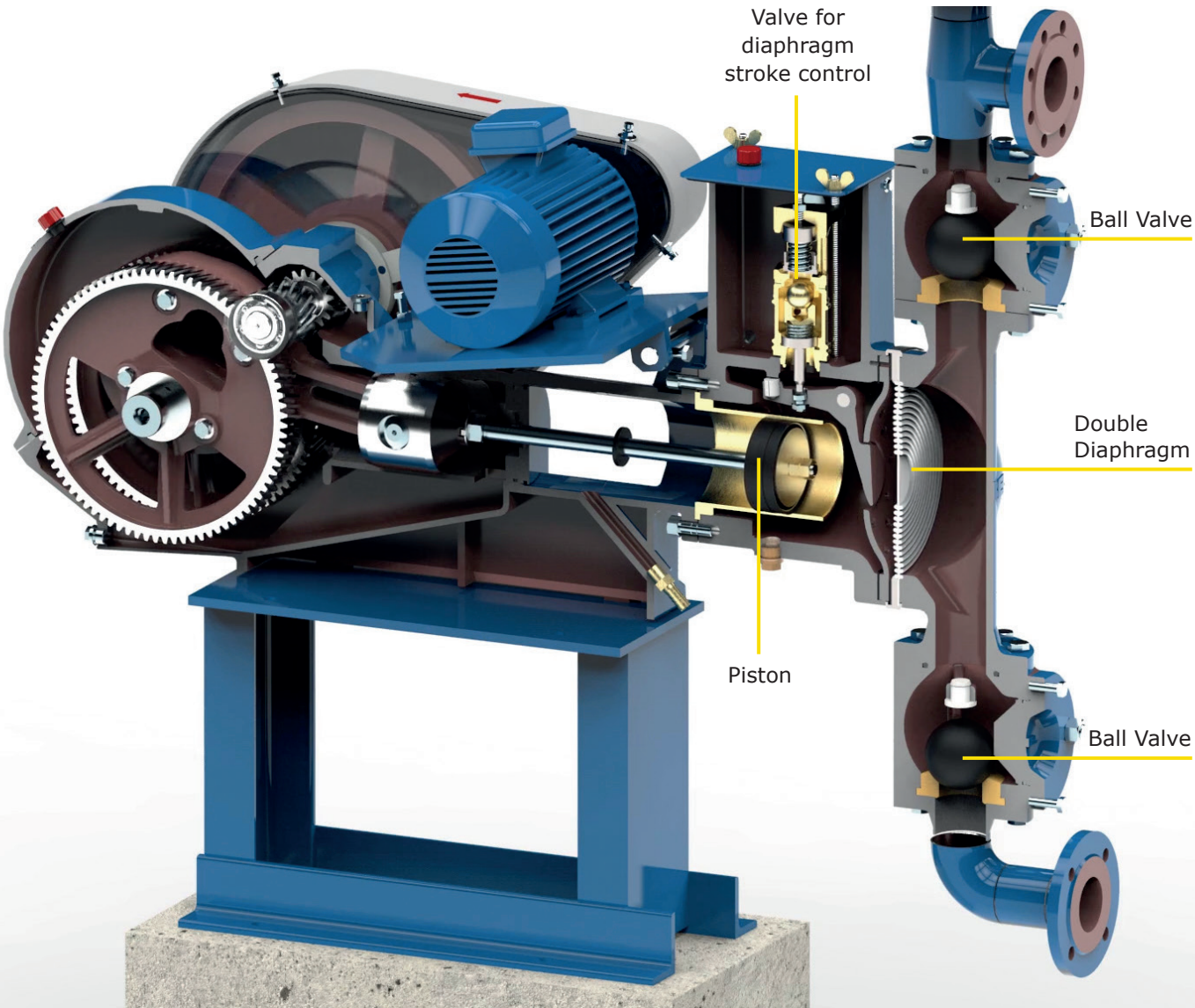
Through the combination of two soft materials ABEL CM pumps run smoothly. **In most cases the pumps are fitted with polyurethane valve balls and seats.** Of course, many other combinations are available.

Valve Balls Materials

- PU, EPDM, FPM, PTFE, PP, stainless steel

Valve Seats Materials

- PU, HD-PE, hardened steel, stainless steel



CM - Compact Diaphragm Pump

Applications

Applications

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

Products being pumped

- Industrial and municipal wastewater
- Sludge/Slurries from industrial, municipal and chemical processes
- Mineral slurries like ceramic slurry, lime slurry, flue gas desulfurization sludge

...and many more.

Suitable Accessories

- Smart Pump Assistant (AI Pump Monitoring)
- Pulsation dampener
- Suction flow stabilizer
- Variable frequency drives (VFD)



Spray dryer feed



Rotary kiln feed



Transfer of wastewater and various sludges



CM - Compact Diaphragm Pump

For feeding medium-sized filter presses

The slurry dewatering process is one of the most challenging tasks of any industrial plant. The proven CM pumps are self-adjusting and well suited for the toughest slurry dewatering applications in medium sized filter presses.



Dewatering automotive slurries with 800x800 mm (31.5x31.5 in.) filter plates

Our pumps maintain a constant flow rate during the entire filling phase. **The pump reduces flow rate automatically when it senses that the filter is full** by means of a control valve. The control valve is tested at the factory as part of the normal hydraulic testing process to ensure calibration.

This automatic flow rate control, does not use complex electronics, makes CM pumps even more reliable and thus increases operational safety. In situations where the environment does not allow the use of frequency converters, the CM pump is ideal because the flow rate is controlled by the pressure-dependent diaphragm stroke control, eliminating the need for a frequency converter.

Since the system is mechanical, it does not require compressed air to work and thereby saves on energy and ancillary equipment system costs.



Filter cake with a solid content of up to 80%



CM polypropylene design

Additional pumps for filter press feeding

The right pump for almost every filter press:

Small filter press: EM Electric diaphragm pump
Medium filter press: CM Compact diaphragm pump
Large filter press: HM Piston diaphragm pump
Filter cloth cleaning: HP High pressure pump

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

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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