

Membrane Pumps
Solids Handling Pumps
High Pressure Pumps
Marine Pumps

ABEL CM

Compact Membrane Pumps
Problem solvers for difficult media



Specialists for tough applications

ABEL[®]
Pump Technology

ABEL CM Compact Membrane Pumps

Capacity range up to 225 m³/h, up to 10,0 MPa

Specialists for tough applications

Stronger than ever. Reliability through double membrane technology.



ABEL CM Pumps – for difficult media

- For sludge transfer
- For filter press or spray dryer feed
- For raw sewage transfer
- For transfer of abrasive, corrosive, acidic, alkaline, pigmented, viscous and granular media

The advantages of ABEL CM

- Up to 225 m³/h
- Up to 10.0 MPa
- Tested design
- Optimal controlability
- Long life
- Serviceability
- Operational reliability through double membrane technology

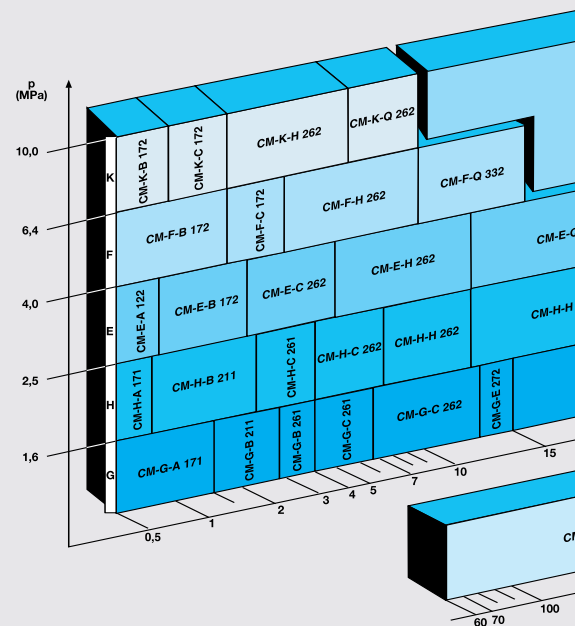
ABEL Compact Membrane Pumps are designed to handle difficult media: for all abrasive, corrosive, granular, pigmented or viscous products. Frequently, they are problem solvers under delicate operating conditions.

At the beginning there are your special operating conditions. Your individual demands and goals are the measure and basis for the overall solution we develop for you. While doing so, we profit from our well-founded know-how that has grown over decades.

For difficult media and applications ABEL compact membrane pumps are the best choice. Down to the last detail they are designed to provide an optimum solution – on a permanent basis.

Enterprises belonging to the sectors of communal slurry dewatering, the ceramics, chemical, pharmaceutical, paint and automobile industry, who attach utmost importance to the continuous economic efficiency, are at best equipped with ABEL Compact Membrane Pumps.

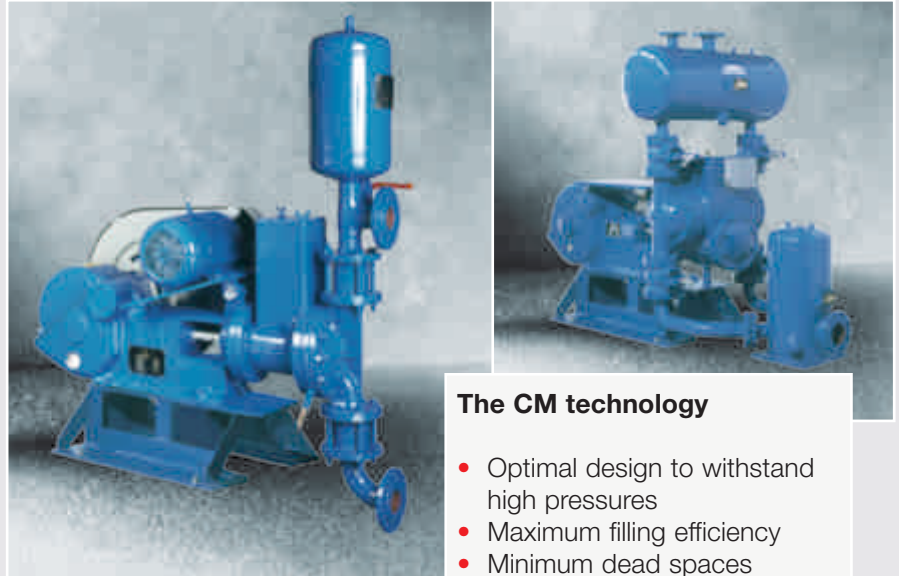
CM Selection chart



ABEL piston membrane pumps have created the reputation of the firm ABEL as a leading manufacturer of reciprocating positive displacement pumps, making them world market leader in filter press feeding (Hydraulic Institute, 1999).

ABEL Compact Membrane Pumps are simplex, single or double-acting specialists for difficult media. Every day they underline their high availability and low wear – during continuous operation. They perform in tough applications in the following industries:

- Water and wastewater
- Mining
- Ceramic
- Cement
- Automobile



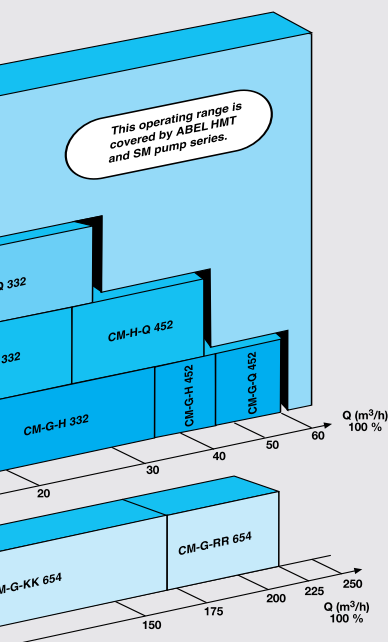
The CM technology

- Optimal design to withstand high pressures
- Maximum filling efficiency
- Minimum dead spaces
- Product side without gland packings
- Ball or conical valves
- Valve housing with inspection openings
- Membrane control indicator
- Safety valve and automatic liquid supplement in the primary circulation
- Central pressure control during filter press operation
- Automatic membrane position control

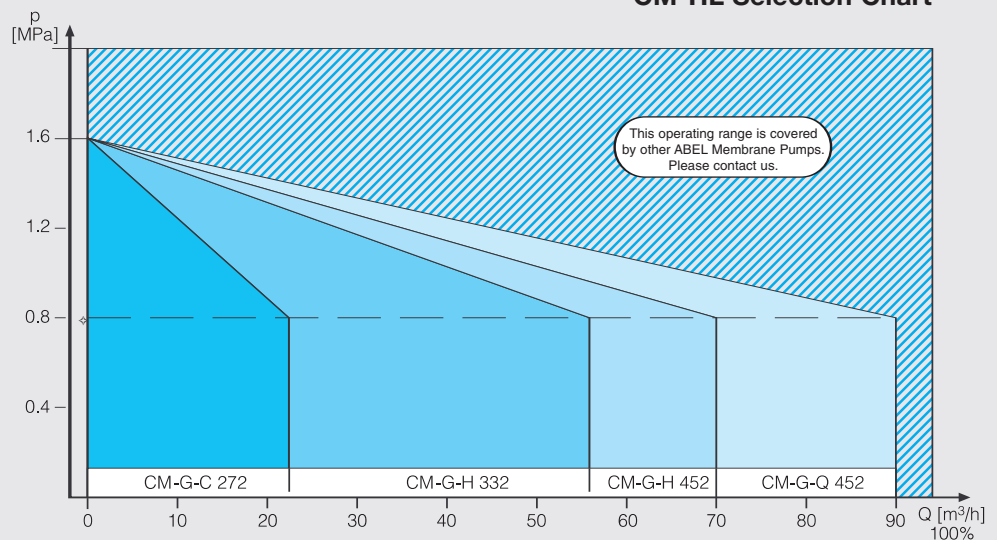
A wide range of suitable materials for all wet end parts are available:

- Nodular cast iron, also rubber lined or coated with Halar®
- Stainless steels
- Steel casting

In line with the market demands the capacity range has once again been considerably extended and does now reach up to 225 m³/h.



CM-HL Selection Chart



Compact force



Optimum design

The technical details described below that make the ABEL Compact Membrane Pumps so unparalleled in function and quality.

Operational reliability through double membrane technology

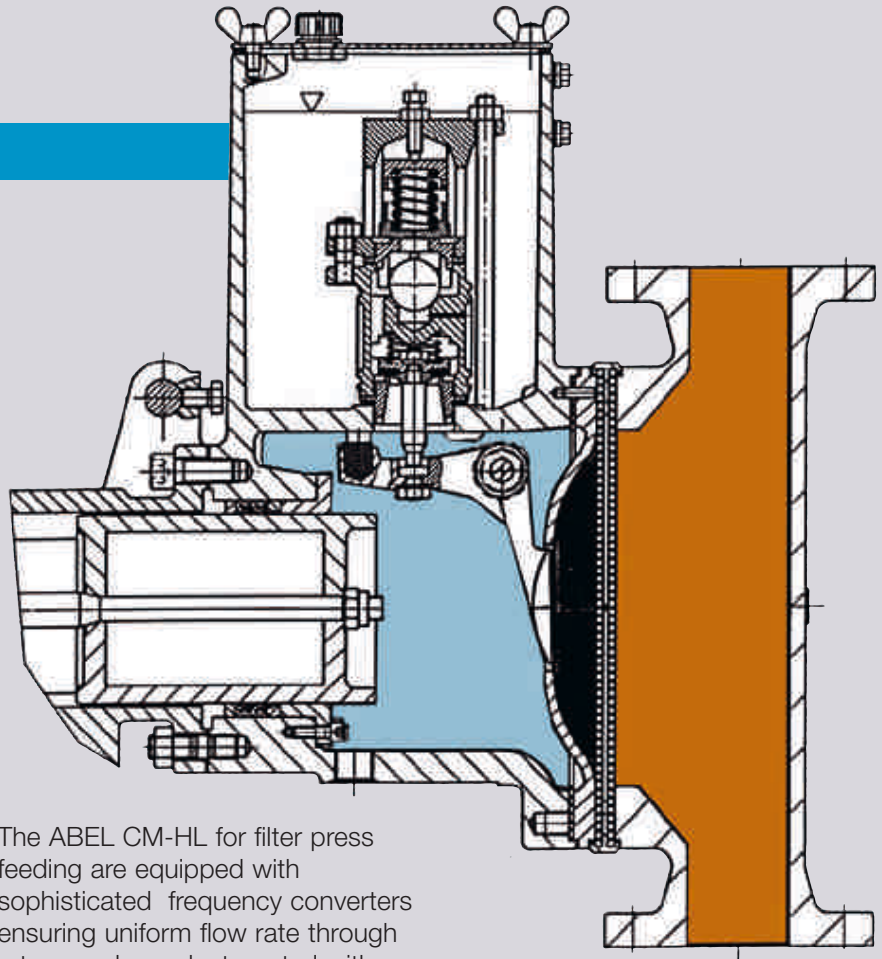
In the event the product or hydraulic medium penetrates into the intermediate space of the double membrane, it is immediately detected by the integrated control function before the product gets into the hydraulic circulation or vice versa. Alternatively, an automatic alarm is activated by an electrical control.

Valve balls for precision and durability

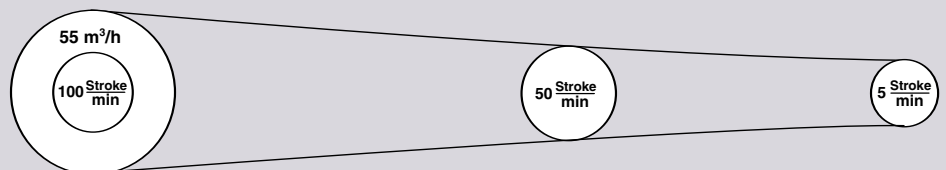
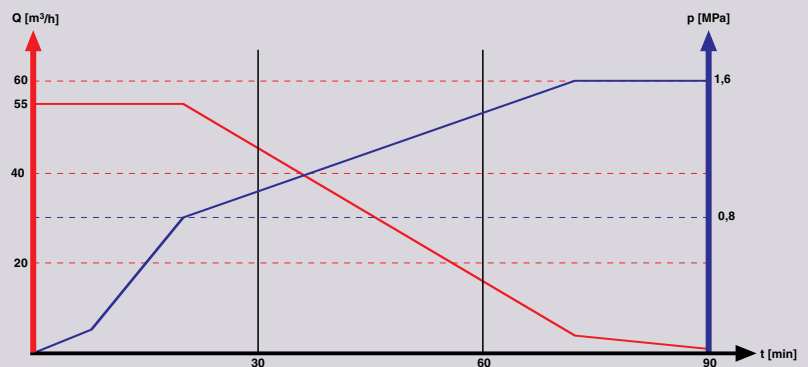
Through the combination of two soft materials ABEL Compact Membrane Pumps run smoothly. In the standard version the pumps are fitted with machine-ground valve balls of highest precision and seats made of polyurethane. Of course, many other combinations are available.

Controlled flow characteristics for feeding filter presses

The membrane stroke control by means of the control valve automatically adapts the flow rate to the throughput characteristics of the filter presses. The control valve is calibrated for each application on the ABEL test stands for limitation of the final operating pressure.



The ABEL CM-HL for filter press feeding are equipped with sophisticated frequency converters ensuring uniform flow rate through a torque-dependent control with reduced energy costs.





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