Movable Floor

TECHNICAL SPECIFICATIONS

EWAC MEDICAL
We get you moving

Product description

In order to be able to carry out treatments and exercises with multiple depths, while not being dependent on the available fixed depths, a movable floor is the solution. The right water depth is essential to the quality of the treatment.

Exact benefits of the movable floor:

a. The physiotherapist can precisely set any desired depth of the pool to the needs of the patients that will be treated.
b. The floor can moved up and down to influence the treatment circumstances.
c. When treating wheelchair- or bed-bound patients the floor can be moved up to deck level.
   The wheelchair or stretcher can then be pushed on the floor and with a simple push on the button the floor slowly sinks into the pool, allowing patients to stay in their chair or stretcher, whilst slowly getting used to the water.

Further:

a. When the floor is at deck level it works as an isolation blanket, thus saving energy.
b. No one can fall in the pool accidentally when the floor is in the top position!
c. The pool with movable floor can be smaller due to the effective use of the available space, and thus decreases the amount of investment in the pool.
d. A smaller, but more effective pool, contains less water. Therefore energy-consumption is reduced.

The movable floor can cover the whole pool, cover the pool partially or can be combined with a second movable floor to accommodate multiple depths at the same time.

Function

The depth is being controlled from a control panel.

The floor construction is a stainless steel frame that is suspended by cables from the walls, or works as a floating platform which is secured to the bottom of the pool with stainless steel cables.

The level of the floor can be adjusted electromechanically with the use of an integrated water hydraulic cylinder. It is powered by a pressure unit that is located outside the pool.

The floor top deck is provided with special, removable tiles which provide a non-skid surface. The floor surface is made permeable to allow water to circulate more freely and therefore minimizes the effect on the filtration process inside the pool.

Anodes are attached to the floor frame to protect it from corrosion when it is submerged.

Guidance wheels support the floor in horizontal directions against the pool walls.

Options

In order to enable the therapist and patients to know the actual depth, a depth sensor can be installed which is connected to the control panel. The depth can be read on the control panel, or on the wall display which allows both the therapist and patients to read the actual depth from any position in the pool area.

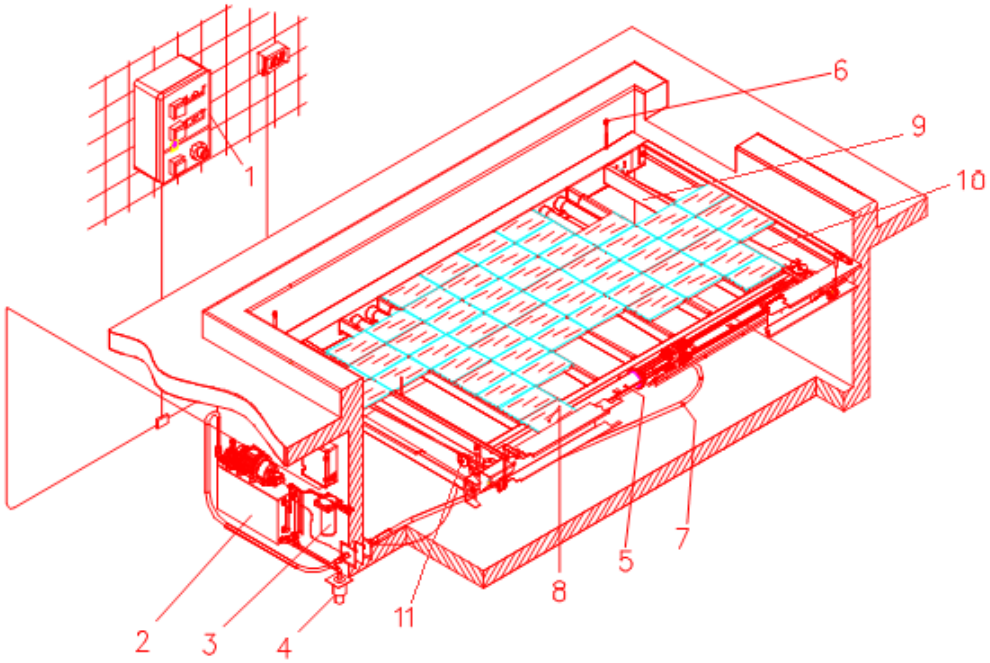
The floor can be controlled in the pool area by either a standard control unit or a touch screen. The actual floor level (depth) can be read from those devices and optionally from a large wall display. The level is measured with a pressure sensor that is integrated in the floor construction.

The floor can be provided with an underwater treadmill which can be controlled via a control (touch) screen and a remote control.

When the floor only covers a part of the pool, a curtain construction is fitted to the floor to prevent people from moving under it. Also one or more removable hand railings can be part of such a construction to prevent people from unexpectedly falling in deeper water

Product characteristics

Main components and materials



1. Control panel
2. Pressure unit
3. Fine filter in mains water supply
4. Drainage
5. Water-hydraulic cylinder –
6. Anchor point – AISI 316L
7. Hydraulic pressure hose - Styrene-butadiene rubber (SBR)
8. Removable tiles – warm-pressed polyester
9. Frame – AISI 316L
10. Cables – AISI 316L
11. Wheels – PETP

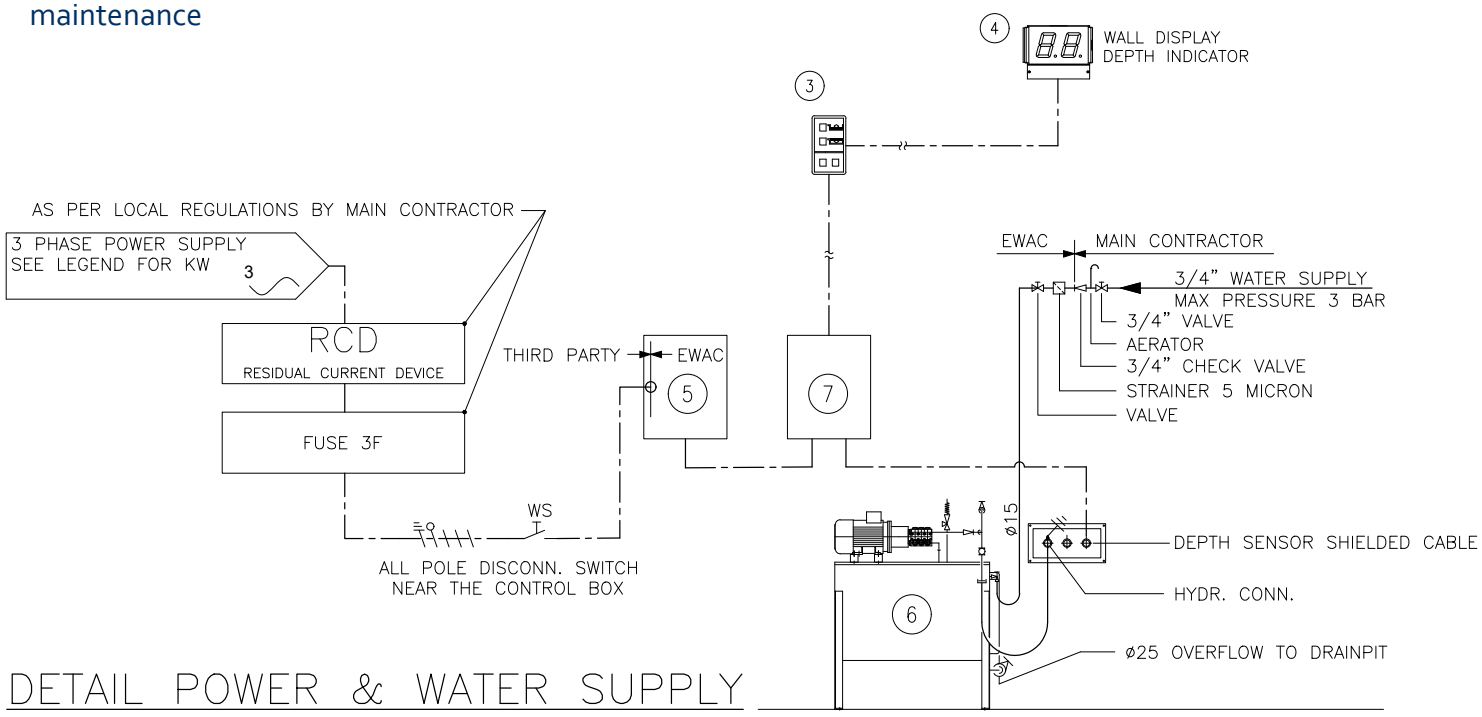
Technical information

Specifications

- Customized dimensions
- Standard stroke 1700 mm
- Recommended speed: approx. 0.5 m/minute.
- Maximum average load in stationary position: 60 kg/m2. (Buoyancy of persons and objects is not taken into account)
- Power: 1.1 kW or 3 kW depending on the size
- IP classification control unit: IP54 (12VAC).
- IP classification control cabinet: IP65.
- IP classification pressure unit: IP55.
- Schemes electrical cabinets: see Appendix A.
- Water supply pressure unit: potable water, Ø15 male.
- Drain pressure unit: >Ø25mm, open connection.
- Max. water hydraulic pressure: 3 bar.
- Lifespan of at least 20 years with recommended maintenance

Pre-installation requirements

- 3 phase power supply in the technical area
- 230/400v-50hz t.b.d. kw 3 phase+0+e
- Four pole switch disconnector near main control box
- 3/4" water supply in the technical area, max press. 3 bar
- Separate potential earthing
- Double wall contact with rccb + earthing
- Conduits
- Sewer connection ø90mm
- Sufficient lighting in the tech. area (min. 2x36w fluor. tube)
- Sufficient ventilation in tech. area (10x/h)
- Drain (gravity)



DETAIL POWER & WATER SUPPLY

EWAC Medical is certified according to:

ISO 9001:2015

ISO 13485:2012

by Lloyd's Register Nederland

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