

The source for world wide pump technology



International Customer Service

Float Switches Level Controllers



Worldwide Presence

HOMA pumps are installed in more than 60 countries around the world—in countless projects of various kinds. They comply to all international safety and quality standards and are certified by many institutions and organisations responsible for national waste water treatment standards. To maintain and further develop this high quality level is our main target.

Network of Sales and Service Partners



HOMA provides a worldwide network of agents and distributors supporting our customers with excellent sales and service assistance in planning, specification and selection, including a computer software program available on CD-ROM or from the WorldWideWeb.

HOMA product range

- Submersible waste water pumps with channel- and vortex-hydraulic
- Submersible propeller pumps
- Submersible grinder pumps
- Submersible, surface and venturi aerators
- Packaged pump stations
- Waste water lifting stations
- Submersible drainage pumps
- Contractor pumps
- Electric and electronic pump controls

HOMA Pumpenfabrik GmbH
 P.O. Box 2263
 D-53814 Neunkirchen - Seelscheid
 Tel.: ++49(0)2247/702-0
 Fax: ++49(0)2247/702-44
 e-mail: info@homa-pumpen.de
www.homapumps.com

Type
 AS, MB / MB-Ex / BO / BS, M2

The source for increased safety and reliability

HOMA float switches - well thought out in detail

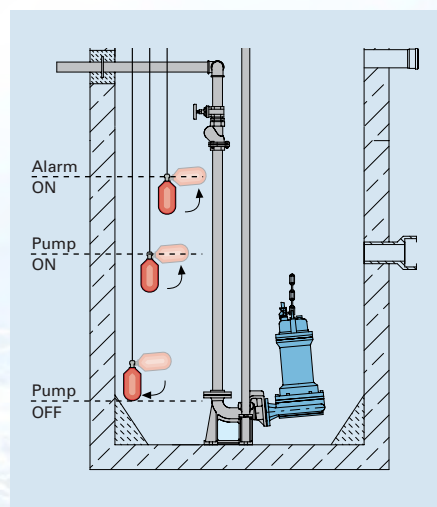
- Mercury-free liquid level controllers for the automatic operation and control of
- pumps or pump stations
 - sewage and waste water disposal units
 - electric gate valves
 - overflow - or dry run protection
 - limit detector or alarm devices

HOMA float switches consist of a robust, watertight composite float body with a built-in micro switch. Depending on the float switch position in the fluid, a switching ball or a toggle weight activates the micro switch and opens or closes the circuit.

Different types of float switches are available with:

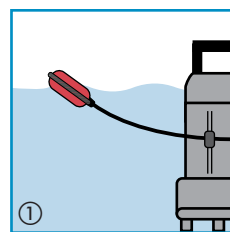
- opening contact (in uplifted position the circuit is opened)
- closing contact (in uplifted position the circuit is closed) or
- dual contact (depending on the cable connection, this switch can be used as an opening- or closing contact)

In case of hazardous liquids, where an overflow has to be reliably prevented, an opening contact switch should be installed, since even in case of a broken float switch cable, the operation of the pump or the alarm is securely provided.

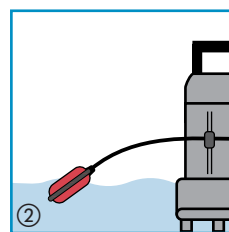


Function of liquid level control

Float switch without toggle weight, combined switch function On-Off

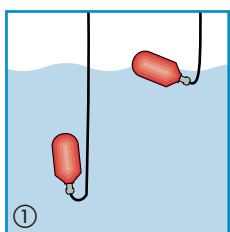


① At reaching the "switch-on level", the float switch activates the pump

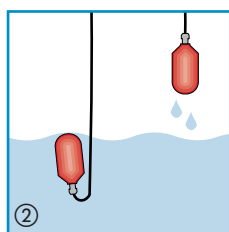


② and switches the pump off when the corresponding level is reached .

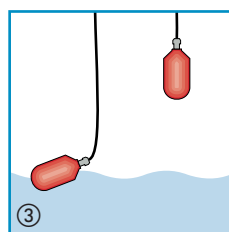
Float switch with toggle weight, seperated switch funktion On-Off



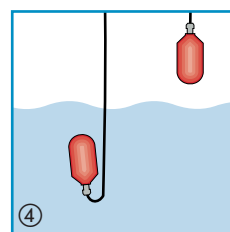
① The "switch-on" controller (above) activates the pump.



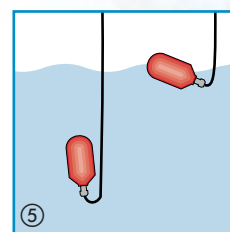
② The liquid level is decreasing



③ until the "switch-off" controller (below) shuts the pump off.



④ Inflowing liquid rises the level



⑤ and the pumping procedure starts again.

Type AS

Float switch with large switching angle, especially as combined On-Off switch for smaller pumps or alarm triggering. High capacity up to 8 A for directly switching the motor current. Depending on the float body's position, the switching ball activates the built-in micro switch. The eight-shaped rolling surface for the ball guarantees a reliable function, even if the liquid level rises very slowly or the cable is twisted. In order to vary the switching differential it is possible to shorten or lengthen the cable between the fastening position (or adjusting weight) and the float body (minimum cable length 10 cm). The switching height itself is set by raising or lowering the fixing point.

The float switch type AS is available as an opening- or closing-contact .



Type MB, MB-Ex, BO, BS

Float switch with intergrated toggle weight, hangs freely from the cable. The required switching point is set by the cable length. The position of the float body varies by rising or decreasing of the liquid level. The container toggles around the integrated weight and thus is prevented from surfacing or being affected by turbulences.

Available models:

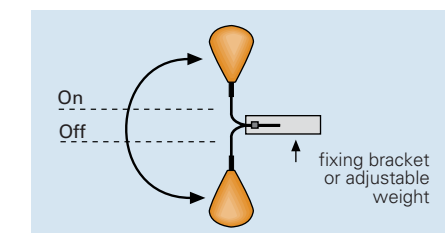
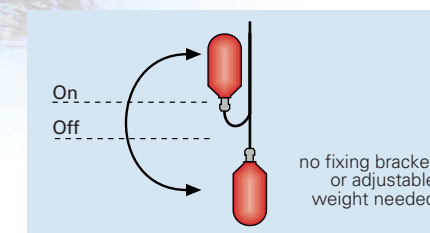
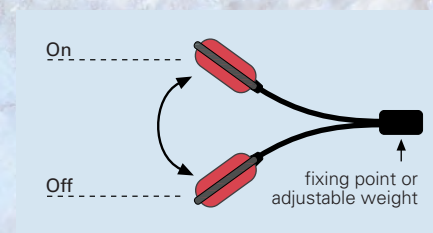
- Standard model (type MB) (available with opening- or closing contact)
- for explosion proof pumps (type MB-Ex) (available with opening- or closing contact)
- Oil resistant model (type BO) (supplied with dual contact)
- Acid resistant model (type BS) (supplied with dual contact)



Type M2

Due to its smaller volume the float switch M2 is suitable for use in liquids without large amounts of solid matter. It is especially suitable for use in small tanks with limited space. This float switch must be fixed according to the required switching level.

The float switch M2 is supplied with dual contact .



Technical data

Type	AS	MB, MB-Ex, BO, BS	M2
Switching voltage	250V AC	4V - 30V AC / DC	4 - 250V AC
Switching capacity	1 mA - 8 A	1 mA - 3 A	1 mA - 2 A
Switching angle	90°	20°	10°
Operating pressure max.	1 bar	0,5 bar	1 bar
Operating temperature max.	90°C	60°C	80°C
Dimensions (in mm)	150 x 85 x 40	190 x 80 dia.	90 x 60 dia.
Material of float body	PP-Copolymerisates	Polypropylene	Polypropylene
Material of cable	synt. Caoutchouc	PES / PVC	TKP / PVC