

### user manual float switch type SMS 280..., SMS 420..., SMS 430...

## safety instructions !!!

### intended use of product

- The sensor has been designed exclusively for the intended use described here or in the data sheet and may only be used in this way.
- The technical specifications contained in these operating instructions must be observed.
- Improper handling or operation of the device outside of its technical specifications requires the device to be taken out of service immediately and an inspection by promesstec.
- When the device is transported from a cold into a warm environment, the formation of condensation may result in the device malfunctioning.
- Before putting it back into operation, wait for the device temperature and the room temperature to equalise.

*The manufacturer shall not be liable for claims of any type based on operation contrary to the intended use !!*

### staff qualification

Improper handling can result in considerable personal injury and damage to equipment. The activities described in these operating instructions may only be carried out by skilled staff who have the appropriate qualifications. For installation and starting of the sensor, the relevant regulations and directives of the country and the norms must be observed. Especially during installation of the sensor, it is possible, depending on the use, to come into contact with aggressive media. The safety instructions must be observed. There will be danger to life if live parts are touched. Electrical installation and commissioning may only be carried out by qualified and skilled personnel.

### special hazards

Residual media in dismantled devices can result in a risk to personnel, the environment and equipment. Sufficient precautionary measures must be taken here. Do not use the instruments in safety or emergency stop devices.

Incorrect application or operation of the instrument can lead to injuries. Depending on the application, aggressive media with extreme temperatures and high pressure or vacuum may be present at the instrument in the event of a fault. We recommend installing and removing the device only at ambient temperature and in a pressureless mode.

### hazards when operating the device

Our devices have a very high protection class when properly mounted and installed. When cleaning your system with high-pressure cleaners, steam cleaners, etc., make sure that the cover as well as the cable screw connection or the plugs are not directly exposed to the pressure jet. If the temperature falls below the dew point, condensation may form in the connection chamber of the device. In such extreme applications, contact our sales and technical support before commissioning.

# level measurement

## commissioning SMS ...

## switching capacities

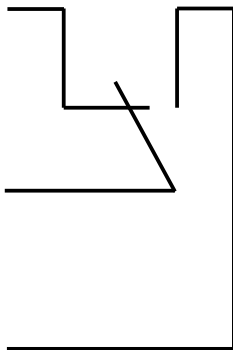
switching capacities float contact:

standard version  
 max. AC/DC 175V; 10VA/10W; 0,5A  
high temperature version  
 (with float ball SZE30 and SKE75 possible)  
 max. AC/DC 30V; 3VA/3W; 0,2A  
 max AC 250V, 2A resp. 24VDC, 3A  
 +45°C...+160°C in 5°C steps

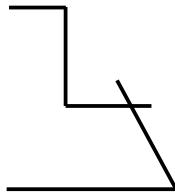
- switching capacities temperatue switch
- temperature range temperature switch

## connection diagrams level switch with fixed cable connection

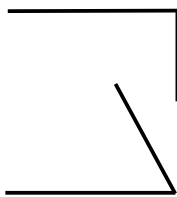
### switching contact changer

	<u>PUR</u>	<u>PVC</u>	<u>silicon/teflon</u>	<u>function</u>
	1	white	white	opener
	2	brown	red	root (common)
	3	green	green	closer

### switching contact opener

	<u>PUR</u>	<u>PVC</u>	<u>silicon/teflon</u>	<u>function</u>
	1	white	white	opener
	2	brown	red	opener

### switching contact closer

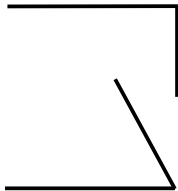
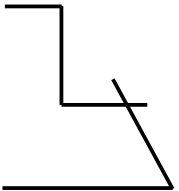
	<u>PUR</u>	<u>PVC</u>	<u>silicon/teflon</u>	<u>function</u>
	1	white	white	closer
	2	brown	red	closer

# level measurement

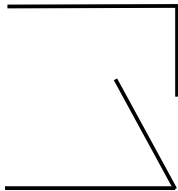
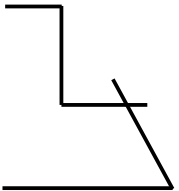
## commissioning SMS ...

### connection diagrams level and temperature switch with fixed cable connection or level switch with 2 switching points

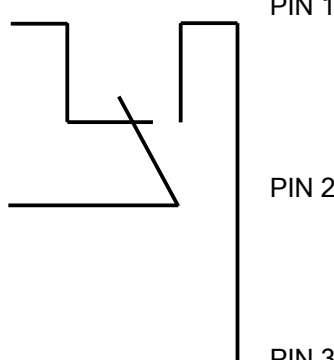
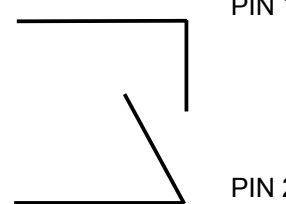
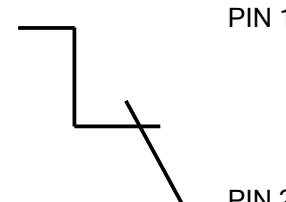
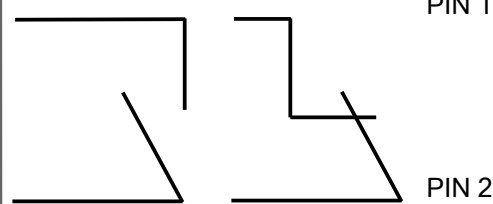
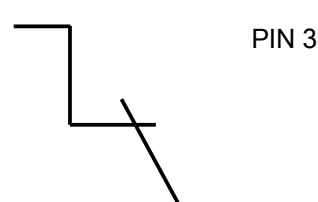
switching contact level closer or opener

	<u>PUR</u>	<u>PVC</u>	<u>silicon/teflon</u>	<u>function</u>
 	1	white	white	closer
	2	brown	red	closer

switching contact temperature opener / level switch closer or opener

	<u>PUR</u>	<u>PVC</u>	<u>silicon/teflon</u>	<u>function</u>
 	3	green	green	opener
	4	yellow	black	opener

### connection diagrams plug connection ISO4400 or M12

switching contact level		switching contact level and temperature	
<p><b>switching contact level only changer !!!</b></p>  <p>PIN 1</p> <p>PIN 2</p> <p>PIN 3</p>	<p><b>switching contact closer</b></p>  <p>PIN 1</p> <p>PIN 2</p> <p><b>switching contact opener</b></p>  <p>PIN 1</p> <p>PIN 2</p>	<p><b>switching contact level closer <u>or</u> opener</b></p>  <p>PIN 1</p> <p>PIN 2</p> <p><b>switching contact temperature opener</b></p>  <p>PIN 3</p> <p>PIN 4</p>	

## level measurement

### mounting instructions !!!

#### mechanical installation

- For the adaptation in your process, use only the welding sleeves and process connections from promesstec.
- The float switches SMS ... are designed for vertical installation. An inclined installation can lead to a malfunction of the float.
- After installation, check that the float ball is running correctly.
- Adhesion as well as highly viscous media and solids in the medium can lead to malfunction of the measuring point. In such cases, regular cleaning of the measuring point is necessary.
- Avoid direct contact with mixers, high-pressure cleaners, etc. when operating the float switch.

#### electrical mounting

- Feed the connection cable through the cable screw connection and install the individual wires on the clamps (for connection head version).
- Tighten the cable screw connection until there is a positive connection between the rubber grommet and the connection cable.
- Screw the M12 socket onto the plug on the promesstec sensor by hand. Mounting is done without tools (for version with connector).
- When mounting the connection cable, ensure that both components are firmly and positively connected. For the permissible tightening torque, refer to the datasheet of the respective connection cable.

### important information !!!

#### return and repair

The promesstec sensor have a modular design. This allows us to repair and overhaul defective devices. To do this, send the device to promesstec. You will find a return form with the information to be provided on our homepage under „technical information“.

#### disposal of the devices

Dispose of devices, components and packaging in an environmentally friendly manner in accordance with the waste treatment and disposal regulations typical for the country in question. Pay attention to waste separation and recycling of high-quality materials such as stainless steel, etc.

#### further documentation

These operating manual and the datasheet can be found as a file on our homepage under the respective devices. The documentation is available in German as well as in English. Other languages are available on request. Additional information can also be found on our homepage.

