selection guide for promesstec float switch with magnetic trasmission

type SMS...

version 2.1.2

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magnetic float switch SMS...

selection float switch

To select the optimum float switch for your application, you first need the following information:

medium
- Which medium should be controlled?
- Which temperature range have the medium?
- Which viscosity have the medium? At first, the following Informations are sufficient "low liquid as water", "viscous as oil" or "highly viscous like porridge". If the medium tends to a strong viscosity change (warm oil, cold oil), the information about the density is necessary.
- Are there particles in the medium?
- If the medium tends to adhere or harden?

mechanics
- How looks the mounting situation (prozess connection)?
- Which mounting legth is required?

electric
- what electrical connection do you want (fixed cable connection, plug or connection head)
- How many switching points do you want?
- What functionality do you want the switches to have? (opener, closer, changer) Observe the switching capacities!
- Do you want the optional temperture switch?
- Which switching do you want for the temperature switch?

By means of the type code you can now choose the float switch. Our sales and application team will be pleased to support you.

please note the following points when compiling:

- selection of temperature ranges

Here we have to differ between the medium temperature and the temperature loadability of the connection cable or the head temperature. The medium temperature is essential for the selection of the electrical design of the switching points as well as the selection of the float ball. The temperature outside the process is essential for the selection of the cable material. For sensors with a connection head or plug, note that the temperature should not exceed +85°C. If you have applications with higher temperatures outside the process please contact us.

- How to measure the mounting length:

You can see the specification of the mounting length as an example on the technical drawings. For sensors without process connection, it goes from the lower edge of the connection head to the end of the rod. For sensors with process connection, the installation length is measured from the lower edge of the sealing collar of the process connection to the lower edge of the rod. Observe the minimum distances of the switching points.

- How to measure the switching point?

The switching point is measured from the lower edge of the rod. The minimum distance for the lower switching point is 50mm from the lower edge of the protection tube. For 2 switching points, the minimum distance between the switching points is 50mm.

- What is the rest position of the float switch?

The rest position of the float switch is the vertical installation position from above without actuation of the float ball by the medium. Due to the adjusting ring and a resulting increased rest position of the float ball, the float ball may possibly already actuate a switching contact.

- What is the switching function of the switching points?

The function of the switching points is specified in the rest position. As soon as the float ball reaches the switching point, actuation takes place.

- Hystere of the switching function?

The SMS has monostable switching contacts. The switching contact is actuated by the float ball. There is no self-retaining when the switching point is exceeded or undershot. The exactness of the switching point is +/-3 mm. For requirements with higher accuracy, please contact us.

- Mounting position of the optional temperature switch

The temperature switch is always mounted at the lowest point at the bottom of the protection tube. This guarantees that the temperature of the medium is measured and monitored immediately upon contact with the sensor. This applies to the vertical mounting position. For other mounting positions, please contact us.

- Switching function of the optional temperature switch

The switching function of the temperature switch can be executed in different ways. This means that the temperature switch can already be wired in series with switch point 1 within the sensor. By standard, it is executed separately from switch point 1.

- Important information in the data sheet:

The type code contains a lot of extra information. Please note that not all selections can be combined.

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Pictorial explanation components float magnetic switch SMS...

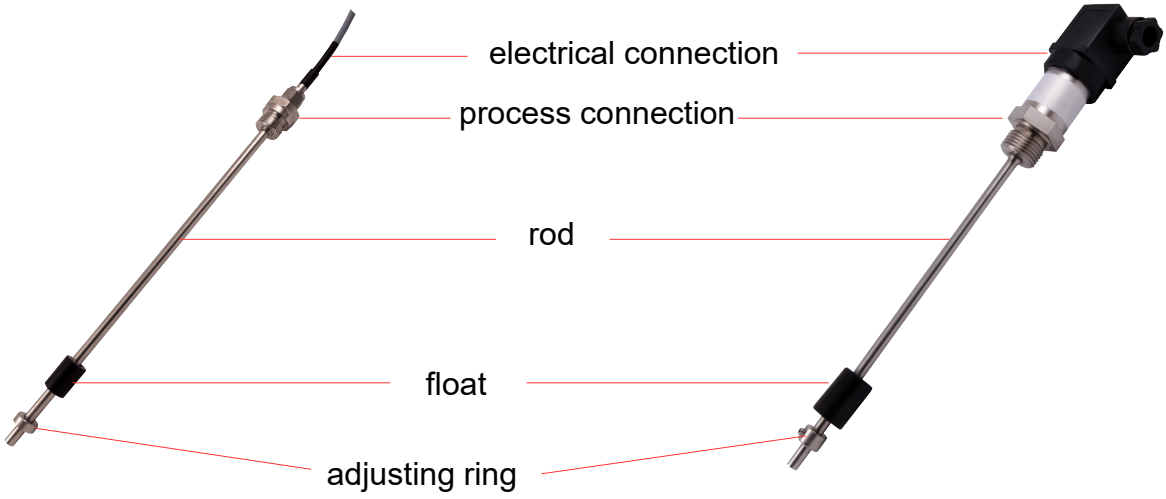

figure exemplary

Info: Further technical details and information can be found in the respective datasheets.

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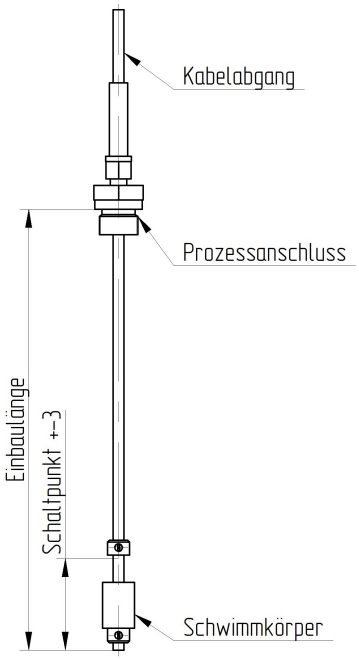
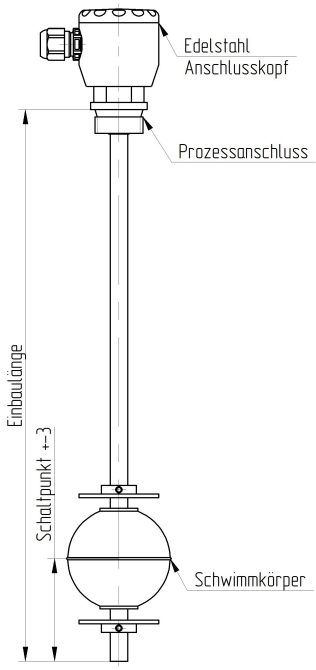
technical drawing magnetic float switch SMS...

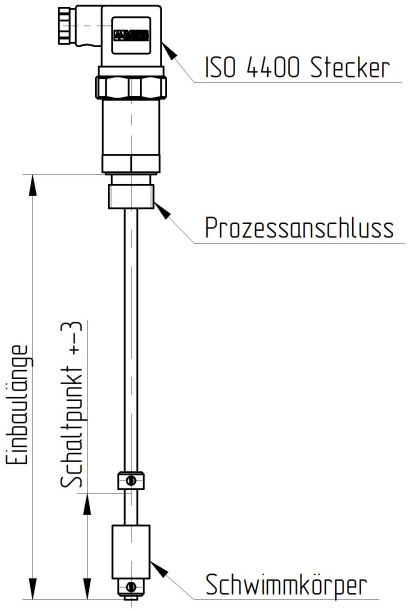


SMS 280...

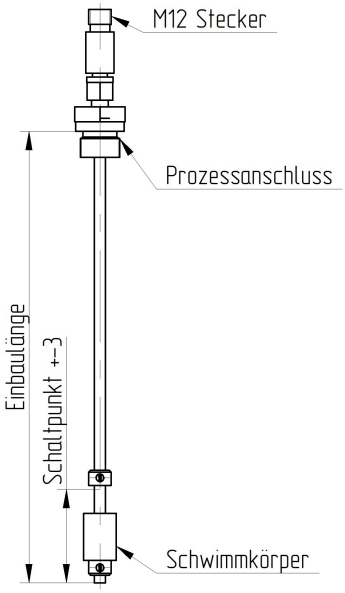


SMS 320...

figure exemplary



SMS 420...



SMS 430...

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