## Schmidt Mess- und Regeltechnik

## Float Switch RLS3000-TN211

Combined level and temperature output, stainless steel


- Combined level and temperature switch
- Temperature range: $-30^{\circ} \mathrm{C}$ to max. $+150^{\circ} \mathrm{C}$
- Electrical connection: cable outlet
- Process connections: G 3/8", G 1⁄2", 1 ½ ", G 2", flange DN50 PN16
- Protection class: IP 66


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## Description

The model RLS3000-TN211 float switch with temperature output combines the recording of the level and temperature of liquids in a single measuring point. The stainless steel used is suitable for a multitude of media, such as, for example, oil, water, diesel and refrigerants.

## Measuring principle

A permanent magnet built into the float triggers, with its magnetic field, the potentialfree reed contacts built into the guide tube. The triggering of the reed contacts by the permanent magnet is contact-free and thus free from wear.

Depending on customer wishes, the switching functions of normally open, normally closed or change-over can be realized for the defined liquid level.

The additional temperature output enables the medium temperature to be monitored by means of a preconfigured bimetal temperature switch or a Pt100/Pt1000 resistance signal.

## Features

- Temperature: 1 bimetal temperature switch or Pt100/Pt1000, accuracy: Class B
- Potential-free switching reed contacts
- Easy installation
- Maintenance-free
- Vertical installation
- Electrical connection: cable outlet
- Temperature range: $-30^{\circ} \mathrm{C}$ to max. $+150^{\circ} \mathrm{C}$
- Protection class: IP 66


## Applications

Combined level and temperature measurement of liquids in machine building
Control and monitoring tasks for hydraulic power packs, compressors and in cooling systems

- plant construction
- mechanical engineering
- process and process engineering
- shipbuilding
- power plants
- turbines
- aggregate construction, etc.


## Important instructions!

Technical changes and errors reserved.
Pictures can be similar.
The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.

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## Dimensions

Electrical connection cable

Process connection G 3 /8", G1⁄2", G1½", G2", flange

Tube ø 12 mm

Cylindrical or spherical float
$\mathrm{T}=$ dead range


| Float type | Dimensions |  |  | Max. operational pressure (MPa) | Max. operational temperature $\left({ }^{\circ} \mathrm{C}\right)$ | Medium density $\mathrm{kg} / \mathrm{m}^{3}$ | Material |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \varnothing \mathrm{D} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \sigma \mathrm{d} \\ (\mathrm{~mm}) \end{gathered}$ | $\underset{(\mathrm{mm})}{\mathrm{H}}$ |  |  |  |  |
| SE3 Cylindrical float | 44 | 15 | 52 | 1,6 | 150 | $\geq 750$ | 1.4571 |
| SE4 Spherical float | 52 | 15 | 52 | 4,0 | 150 | $\geq 750$ | 1.4571 |

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| Level switch points (max. 3 switch points) <br> Note: For more than 2 switching points, the minimum distance between the second and third switching points is 80 mm , as more than 2 switching points require a second float. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Switching capacity | Normally closed / Normally open |  |  | 230 V AC; $100 \mathrm{VA} ; 1$ A AC |  |
|  |  |  |  | 230 V DC; 50 W; 0,5 A DC |  |
|  | Change over |  |  | $230 \mathrm{~V} \mathrm{AC} ; 40 \mathrm{VA} ; 1$ A AC |  |
|  |  |  |  | 230 V DC; 20 W; 0,5 A DC |  |
| Switching function | Normally closed, normally open, change over: with rising level |  |  |  |  |
| Temperature switching points |  |  |  |  |  |
| Switching capacity | 250 V AC 2,5 A; 60 V DC 1 A; (min. 50 mA ) |  |  |  |  |
| Switching function | Normally open or normally closed |  |  |  |  |
| Measuring element | Temperature switch |  |  |  |  |
| Temperature range | $+50^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$, selectable in $5^{\circ} \mathrm{C}$-increments |  |  |  |  |
| Switching accuracy | $\pm 5^{\circ} \mathrm{C}$ |  | ysteres |  | $20^{\circ} \mathrm{C}$ |
| Technical data |  |  |  |  |  |
| Mounting position | vertically, $\pm 30^{\circ}$ |  | Max. pressure |  | 4,0 MPa |
| Medium density | $\geq 750 \mathrm{~kg} / \mathrm{m}^{3}$ |  | Protection |  | IP 54 |
| Medium temperature | $-30^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$ |  | Length of tube L |  | Standard: up to 6000 $>6000 \mathrm{~mm}$ on reque |
| Process connection | Standard: G $3 / 8$, G $1 / 2,111 / 2^{\prime \prime}$, G $2^{\prime \prime}$, Flange DN50 PN16, Other versions on request |  |  |  |  |

## Note <br> For versions without protective conductor connection operation only at safety extra-low voltage or external grounding.

## Ordering information

Type / output signals for level and temperature / switching function / electrical connection / process connection / sliding tube length L/medium temperature

