

## Bistable Switch BSM501



## Safety Precautions

- Assembly, commissioning and servicing may only be performed by specialist personnel! Applicable European and national regulations for erection of electric systems must be complied with
- Connect the device only to voltage indicated in the technical data and on the nameplate.
- In case of assembly or maintenance work, the device must be disconnected from all currents!
- Operate the device only under the conditions defined in the operating instructions!


Attention!

- Do only use IER-floats or -counterweights
- Do not open up the casing, do not unscrew the black sleeve nut!
- Set magnet rocker with a magnet to correct position before placing into service (see drawing on the plate).
- The cable plug must always point down.
- Always install float or counterweight with "TOP" sign upside
- Welded stainless steel tubing is magnetic. Use only drawn, seamless tubing in order to prevent loss of magnetic strength.
- Do not mount or store the switch near strong magnetic fields or ferromagnetic parts such as steel bars, frames or parts of steel tanks.


## Technical data

Switching principle:
magnetic actuated micro switch with change over contact
Rated voltage:
4V ... 250V AC, 4V ...30V DC
Rated current:
$1 \mathrm{~mA} \ldots 3$ ( $\mathrm{AC} \mathrm{u} . \mathrm{DC}$ )
Please note!
The bistable switch has been designed for use in applications with 1 mA to 3 A at 4 to 250 V . However, the switch may only be used with a single circuit type for the entire duration of its service life!


Connection: Contact position while float is in lower position
Contact position: (terminal 2 = root)
Below Lower Limit: 2-3 closed / 2-1 open
Above Upper Limit: 2-1 closed / 2-3 open
Electrical connection:
3-pole cable plug acc. DIN EN 175301
(often used for solenoid valves), with PE terminal

Max. cable cross section: $1,5 \mathrm{~mm}^{2}$
min. distance between two switching points:
40 mm , (turn contacts at tube at least $120^{\circ}$ )
Max. liquid temperature:
$+115^{\circ} \mathrm{C}$
Ambient temperature:
$-20 \ldots+90^{\circ} \mathrm{C}$
Housing:
IP 65 acc. EN60 529

## CE- labels:

In accordance with low-voltage directive (2006/95/EC) and EMC directive (2004/108/EC)

Use in potentially explosive atmospheres:
In accordance with EN 50 020, section 5.4, the BSM 501 bistable switch is a simple apparatus without its own source of ignition.
As such it is not included in the range of applications specified in directive 94/9/EC (ATEX).
Simple apparatus can be set up in category 1 (zone 1), and category 3 (zone 2 ) potentially explosive atmospheres. Power supply must be intrinsically safe, i.e. the bistable switch must be connected via a Zener barrier or an approved buffer amplifier.
Certification or identification of simple apparatus is not required by the EC directive.

