Fill level probe
NIVOMAT FSG

SAFETY INSTRUCTIONS

- Installation, commissioning and maintenance may only be performed by qualified personnel!
- Only connect the device to the voltage specified in the technical data or on the type plate!
- Disconnect the device from the power supply during installation / maintenance work!
- Only operate the device under the conditions defined in the operating instructions!

DESCRIPTION

The NIVOMAT FSG... level probe generates an almost continuous 4...20mA signal (resolution 1cm). It is suitable for mounting on our level indicators, for example MAGTOP G5... and MAGTOP 316. The NIVOMAT FSG level probe is fitted with largely shock- and vibration-resistant reed contacts at 1 cm intervals, which are actuated by a magnet in the float of the level indicator.
When the supply voltage is applied, the probe immediately outputs a current corresponding to the fill level.

There are various options for evaluation:
- Process display BAMOWIZ
- Limit value relay EVEREST 214S
- Analogue input of a PLC
- Other commercially available display devices with 4...20 mA input

TECHNICAL DATA

Materials	Stainless steel, PVC, PE-HD, PP
Supply voltage	12...28V DC
Output	4...20mA; two-wire connection
Resolution	1cm
Measuring range	300...3000mm
Ambient temperature	Stainless steel version (PC connection head): -20...+70°C Stainless steel version (aluminium connection head): -20...+85°C PVC version: 0...+60°C PP version: -10...+70°C PE version: -20...+60°C
Protection class	IP65 (according to EN 60 529)
Connection cable	0.5...1mm², shielded
Cable length	Max. 300m

CE mark: The device fulfils the legal requirements of applicable EU directives

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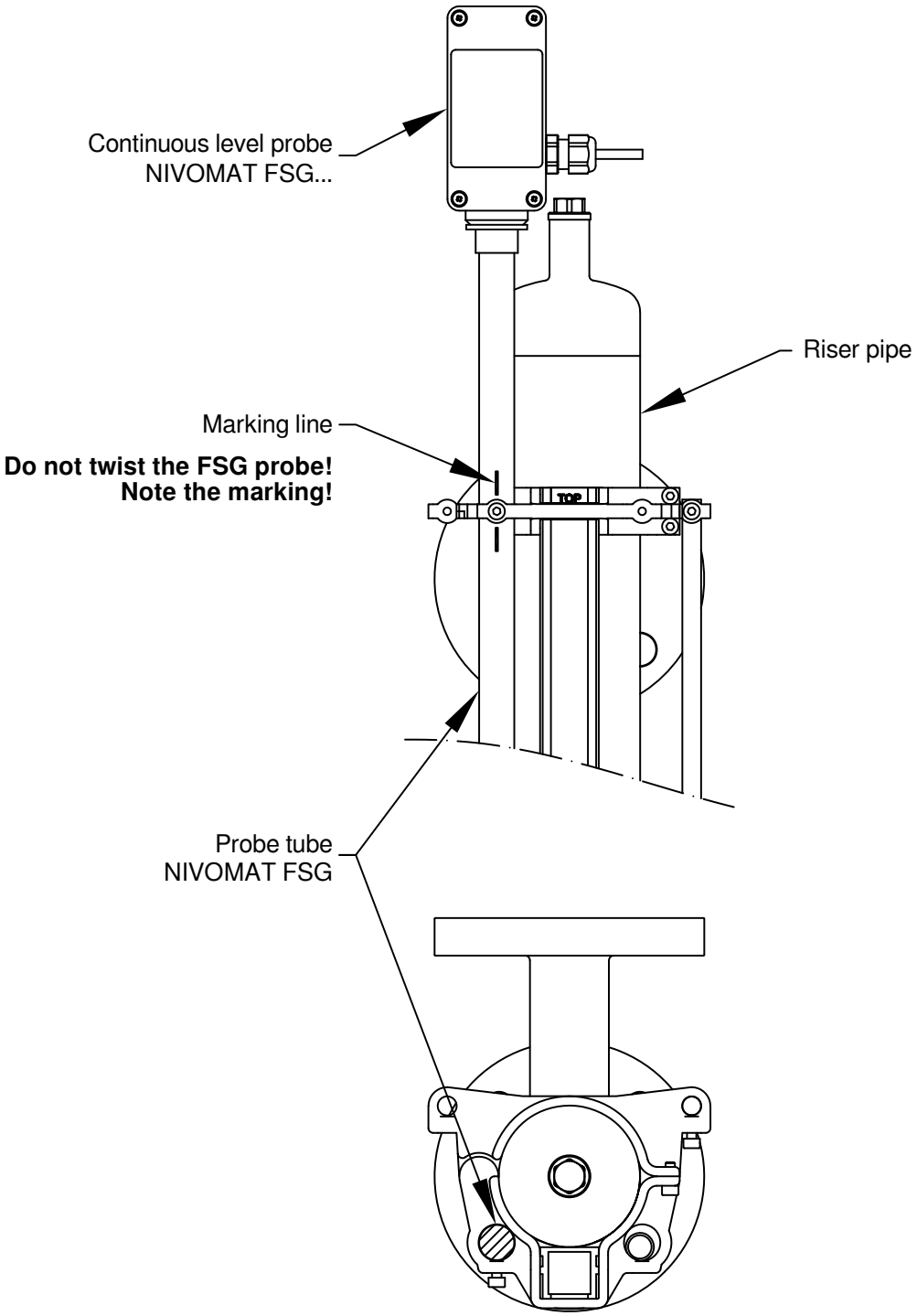
MOUNTING

NIVOMAT FSG... to MAGTOP 316



Mounting flange for NIVOMAT FSG
and guide rail (option for MAGTOP Snap)

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MOUNTING (continuation)

NIVOMAT FSG... VA to magnetic flap indicator MAGTOP G5.

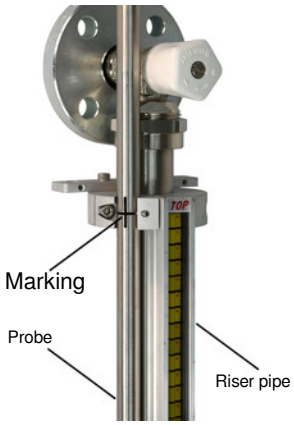
To install the MAGTOP G5 magnetic flap indicator, the level probe FSG... VA must be removed from the pipe.

The PP float must be inserted into the MAGTOP G5 so that the 'TOP' marking points upwards.
Attention! Only use floats of type M25 from BAMO IER, as these are equipped with the magnet system suitable for the NIVOMAT FSG... VA probe.

When installing the riser pipe of the MAGTOP G5, ensure that the spanner flats of the union nut are positioned so that the pipe of the NIVOMAT FSG... VA probe is not in contact with the union nut.

The NIVOMAT FSG... VA probe may only be mounted vertically (connection head at the top)

The fastening clamps of the NIVOMAT FSG... VA probe must not be twisted. The markings on the probe tube and the clamp must be aligned.



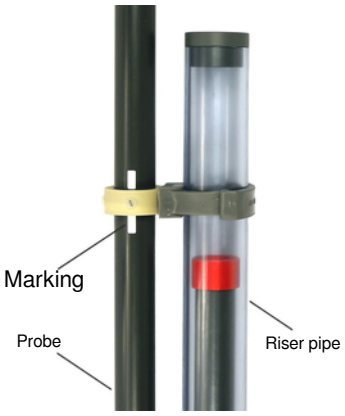
NIVOMAT FSG to level indicator FS4

The NIVOMAT FSG... probe may only be installed vertically (cable connection at the top).

Height adjustment:
- Remove the brackets from the clamps
- Move probe vertically on the riser pipe
- Reattach the bracket to the clamps

Please note:
Do not twist the probe in the fastening rings!
Pay attention to the markings!

Please note:
When the probe is underrun, the measured value jumps to >20mA (error)



Markings on the FS probe

NIVOMAT FSG... VA to sight glass level controller GNR5

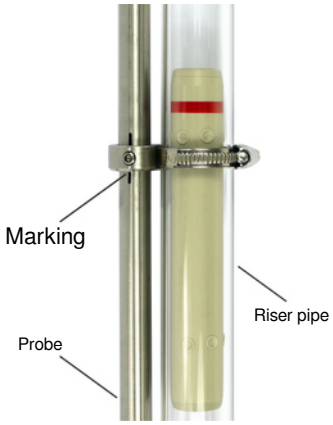
To install the GNR5 sight glass level indicator, the FSG... VA level probe must be removed from the pipe.

The PP float must be inserted into the GNR5 so that the red marking ring (top) is pointing upwards.
Attention! Only use floats of type S5/25d from BAMO IER, as these are equipped with the magnet system suitable for the NIVOMAT FSG... VA probe.

When installing the sight glass of the GNR5, make sure that the spanner flats of the union nut are positioned so that the tube of the NIVOMAT FSG... VA probe is not in contact with the union nut.

The NIVOMAT FSG... VA probe may only be mounted vertically (connection head at the top)

The fastening clamps of the NIVOMAT FSG... VA probe must not be twisted.
The markings on the probe tube and the clamp must be aligned.



Markings on the FS probe

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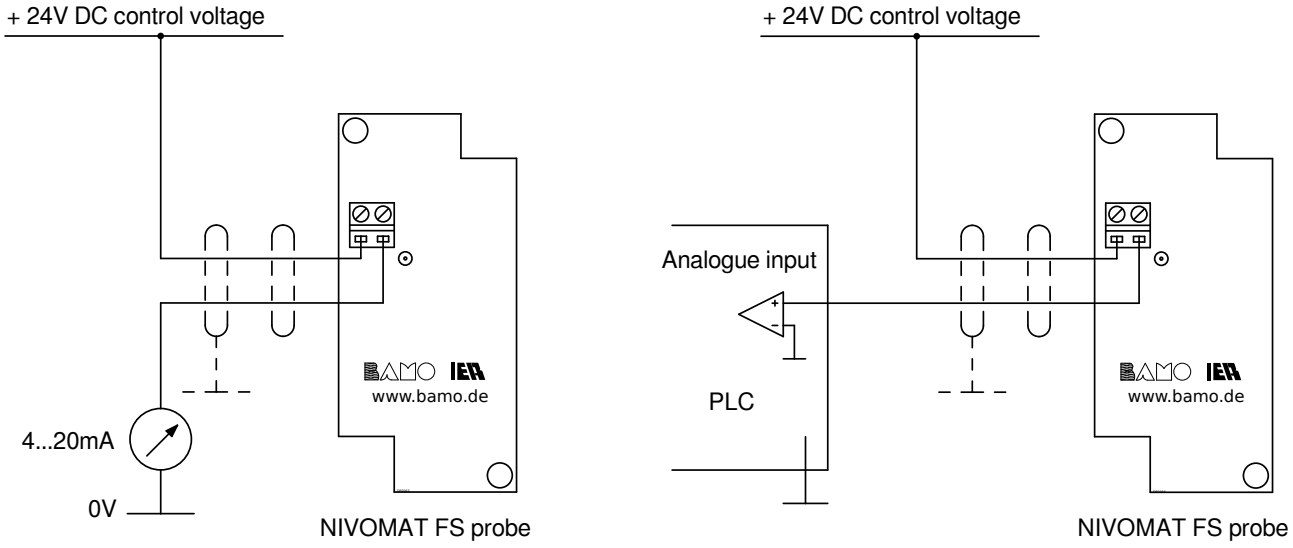
ELECTRICAL CONNECTION

- Use shielded cables with a minimum cross-section of 0.5mm².
- Observe max. cable length
- Comply with EMC regulations.

Supply voltage: 12...28V DC
Output current: 4...20mA



Note:
The signal cable can be connected to the FS probes in any way; it is not necessary to pay attention to the correct polarity.
Only the measuring device/PLC input must be connected with the correct polarity.

COMMISSIONING

At the start of commissioning, the level probe NIVOMAT FSG... should be checked with an ammeter to ensure that an output current between 4...20mA is flowing.

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