

# Flow data sensor ZE 3000

## micro-processor controlled for accurate flow measurement and evaluation



### Product description

The ZE 3000 emits a 4..20 mA signal according to industrial standards, generated in the DFM by the precise magnet angle detection of the magnetic float.

Existing flowmeters (with magnetic floats) can be easily retrofitted with the ZE 3000 to electrically signal the flow and, for instance, to further process the values in a PLC for process control or to directly display the flow rate.

This micro-processor controlled unit is programmed by ASV Stübbe for the DFM concerned! This guarantees accurate flow measurement and evaluation.

**IMPORTANT:** The DFM to which the ZE 3000 is to be fitted must be known in advance!

### Features

- 2-wire technology
- 4..20mA analog output
- 8..28VDC input
- Individual programming adapted to the DFM
- 11 point calibration
- non-volatile value storage
- 0 button to compensate for the surrounding magnetic influences
- Factory setting of the lower limit value (low-cutoff) 0..99% according to customer's specifications
- Factory settable time lag (low-pass-filter) 0.1...2.5 sec according to customer's specifications
- Measuring accuracy better than 0.5%

### Installation

Screw clamps are used to fit the ZE 3000 on the dovetail guide of the flowmeter. The plug connector is located in the upper section.

When mounting, ensure that the notch of the ZE 3000 is located at the half-way mark of the flow capacity on the medium scale.

Following this, proceed with the wiring according to the plug assignment plan.

#### Note

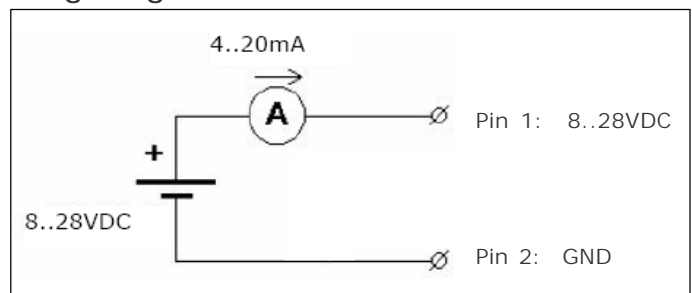
The medium description is located on the respective scale.

The percent scale refers to H<sub>2</sub>O unless otherwise specified.

For parallel mounting of several flowmeters with ZE 3000 observe the following minimum spacing:

- 400 mm for DFM 335 and DFM 350
- 200 mm for DFM 165 and DFM 200

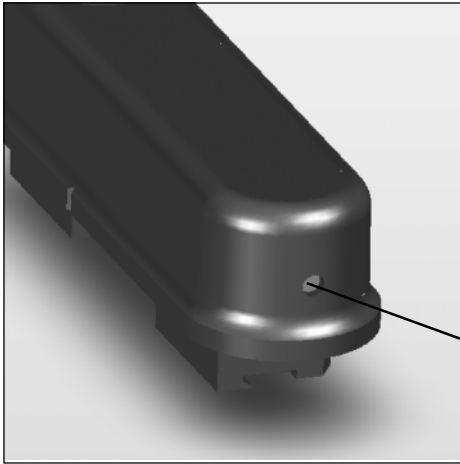
### Plug assignment



### Start-up

Once installed and the voltage is applied, press the 0 button for at least 2 sec to compensate for surrounding magnetic influences.

During this phase ensure that the float is in its bottom position, i.e. no flow must take place!



**Note:**

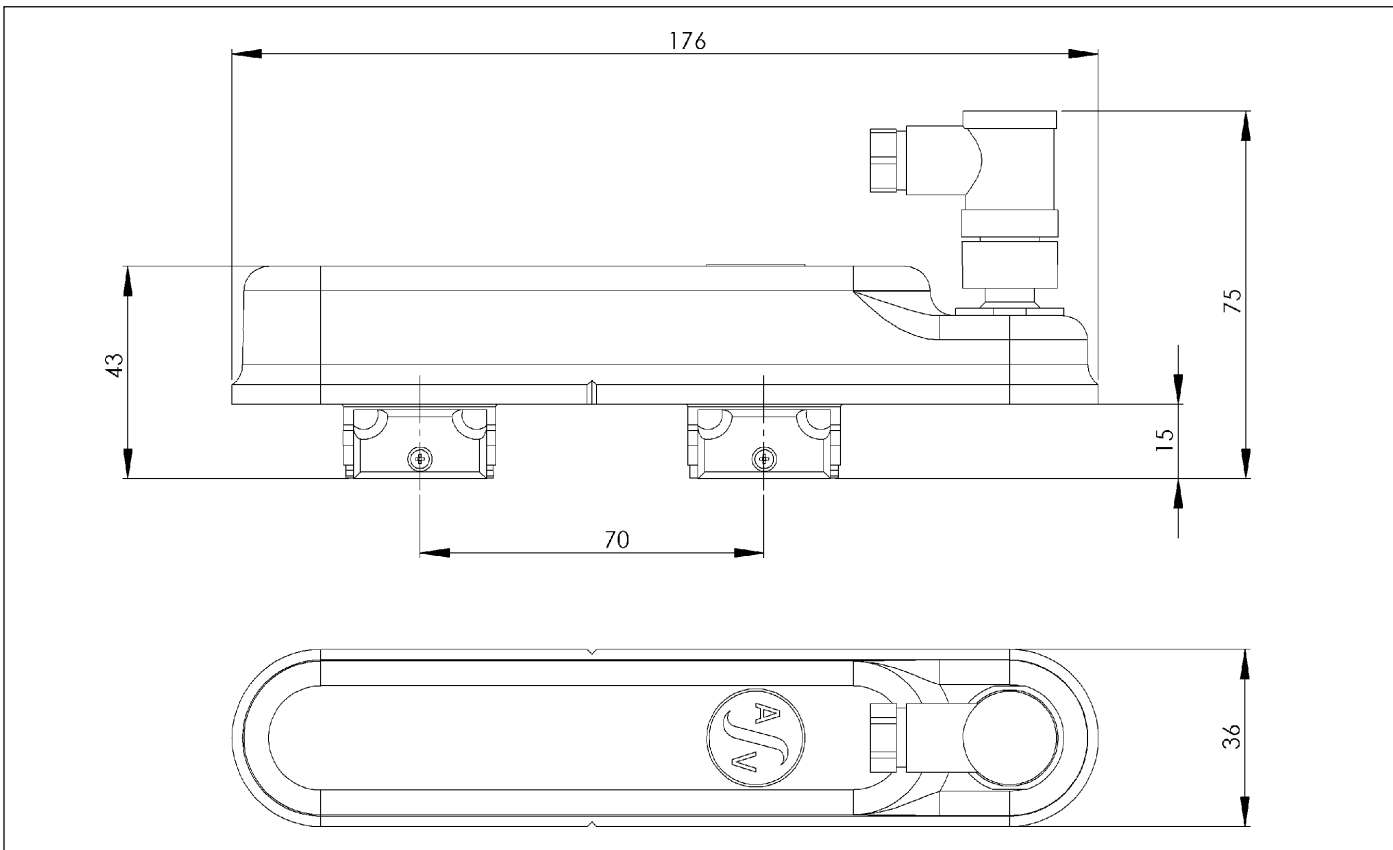
Do not actuate the button during normal operation.

Concealed 0 button

**Electrical/mechanical parameters**

parameters	min.	type	max.	unit
voltage supply	8		28	Volt DC
output current 0% -> 100%+overrange				
during normal function (pin 1 – pin2)	4.0 -> 20.1	4.0 -> 21.0	4.0 -> 22.0	mA
ambient temperature	-30 (-20)		65 (150)	°C (°F)

**Dimensions**



Ident.No.: 137251

Subject to technical modifications