

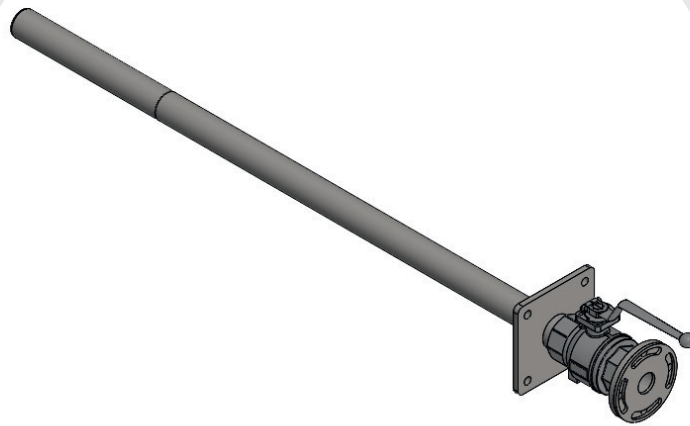
Speed measurement

SENSOSTREAM - THE INTELLIGENT MODULAR SYSTEM

The **SensoStream** is the next level of monitoring and optimization up to automatic plant control.

The modular system allows (depending on the selected components) an exact speed measurement, floating layer detection, level measurement and viscosity measurement.

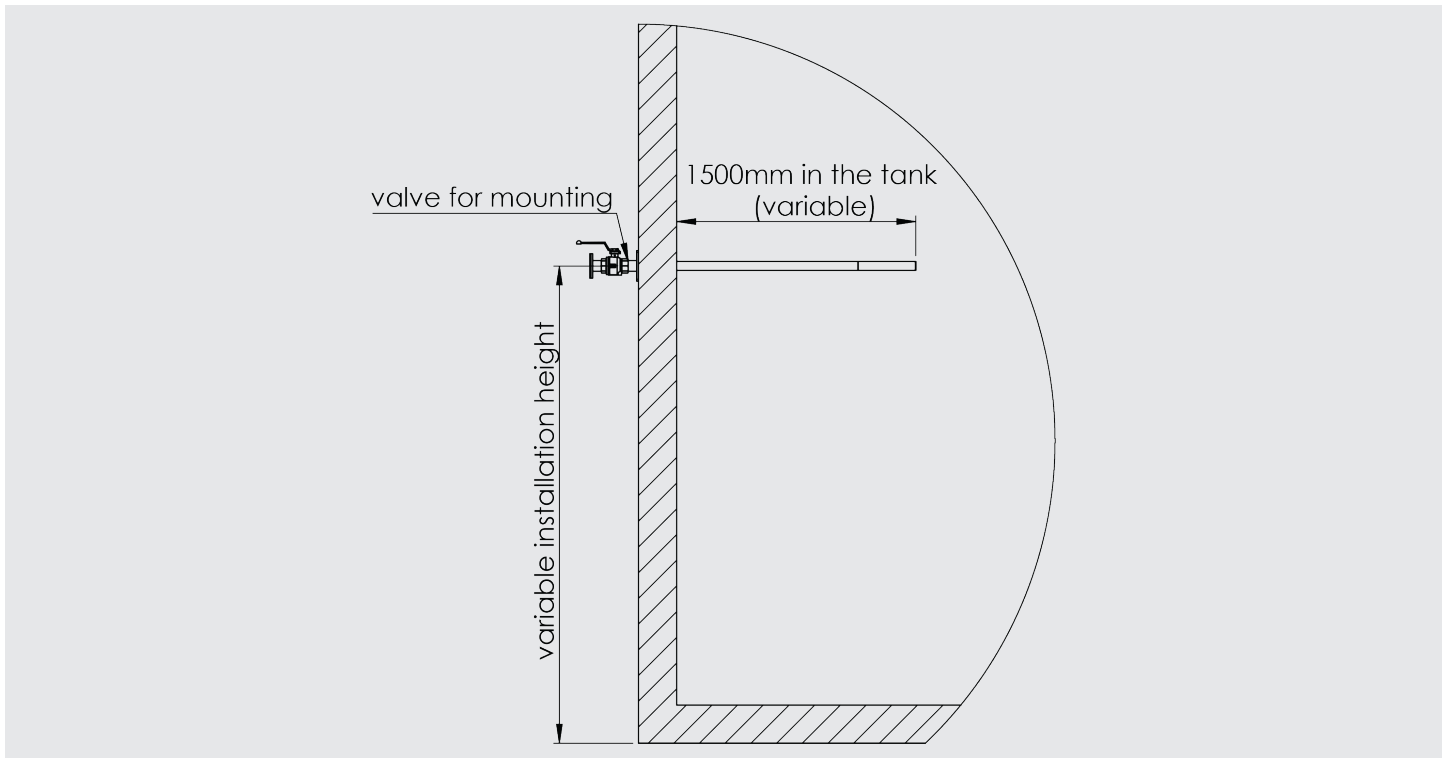
The **SensoStream** enables optimization of the entire biogas plant. Potential energy savings are exploited, and the gas yield is maximized. The real-time measurements allow faults to be detected at an early stage so that they can be avoided as best as possible.



MODULAR COMPONENT SPEED MEASUREMENT

The calibrated sensors of the **SensoStream** are brought in from the outside (even if the container is already filled).

The sensors can continuously measure the speed of the substrate. If a set range is not reached, the **SensoStream** emits a warning signal so that the agitators can be switched on or off accordingly. In this way, deposits in the container are avoided and the substrate is kept in a speed range that is optimal for the fermentation process.



Dimensions and connection to the tank

Pipe diameter:	48,3mm
Length of the sensor:	1,8m (depending on the tank wall thickness and length of stem)
Length of inflow area:	300mm
Hole tank wall:	at least 52mm
Dimension valve:	2,5-inch (with sealing washer)

Measurement

Measuring range:	0cm/s bis 30cm/s (maximum 1,5m/s)
Sensors:	load cell with ATEX-protection 5V bridges power supply -20° to +70°C
Measurement amplifier:	supply voltage 24VDC analog output (signal adjustable) 2 digital logic inputs

Calibration in drag channel

Drag channel:	length 2000mm width 600mm depth 450mm
Motor:	DC motor (stepper motor)
Channel filling:	substrate
Measurement:	speed measurement, power transmission to the sensor
Aim:	formation of speed-force-function
Statement:	force = speed