SlideControl 2.0

envea

Flow monitoring on air slides

PROCESS MONITORING SYSTEMS FOR SOLIDS

Product Information

FEATURES:

- contactless throughput measurement for air slides
- no installations into the process
- 4 ... 20 mA trend signal for the flow rate
- fast recognition of Flow / No Flow conditions
- easy retrofitting

TECHNOLOGY

USE

Powdery products are transported in air slides in many industries. Until now it was not possible to continuously get information about the flow.

With SlideControl 2.0 there is now a sensor available, which monitors the material flow in the slide without any contact.

SlideControl 2.0 is characterized by the opportunity of an easy and retrofit installation on the air slide.

FUNCTION

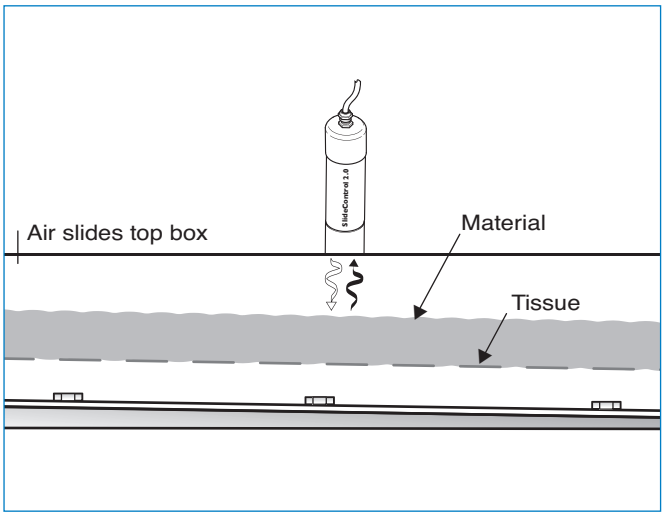
By using microwaves SlideControl 2.0 measures the distance between the flowing material surface and the sensor and thus the filling height of the flowing material on the tissue.

On the basis of the information about the filling level, the sensor can be calibrated by means of the evaluation unit to mass / time.

The calibrated flow rate is output as 4 ... 20 mA signal; in addition, a relay contact could be used for alarming.

In case of a standstill or if the transportation will be disturbed, the output signal at the transmitter drops to 4 mA, even if there is still material in the air conveyor.

For the calculation of the flowrate a constant speed is assumed.



TECHNOLOGY

SYSTEM

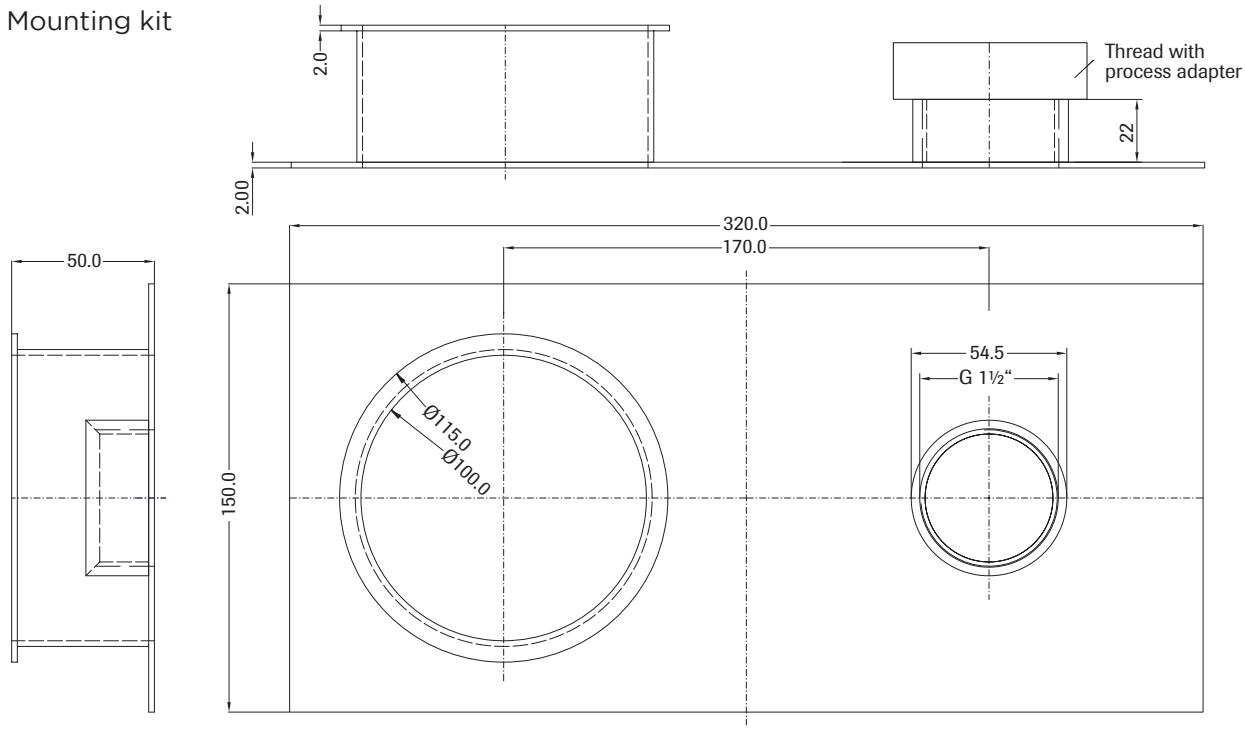
SlideControl 2.0 consists of a sensor, the associated transmitter and a mounting kit.

The maximum distance between sensor and transmitter may be up to 300 m.
The sensor doesn't need any additional auxiliary power supply. It is powered by the transmitter.

The associated transmitter is available as DIN Rail version or in a field-enclosure with display.

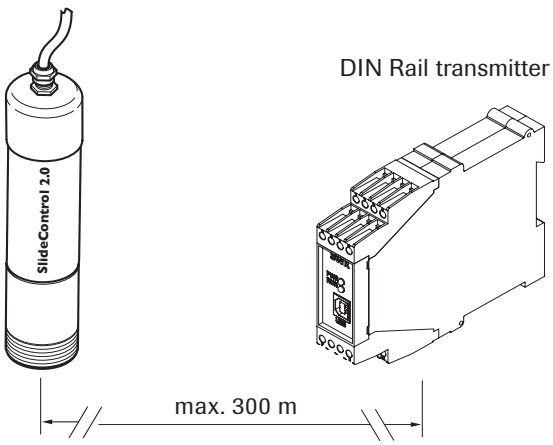
The mechanic installation occurs through the mounting plate, which has a 1½" process connection for the sensor and a second closable opening for inspection and calibration purposes.

Mounting kit

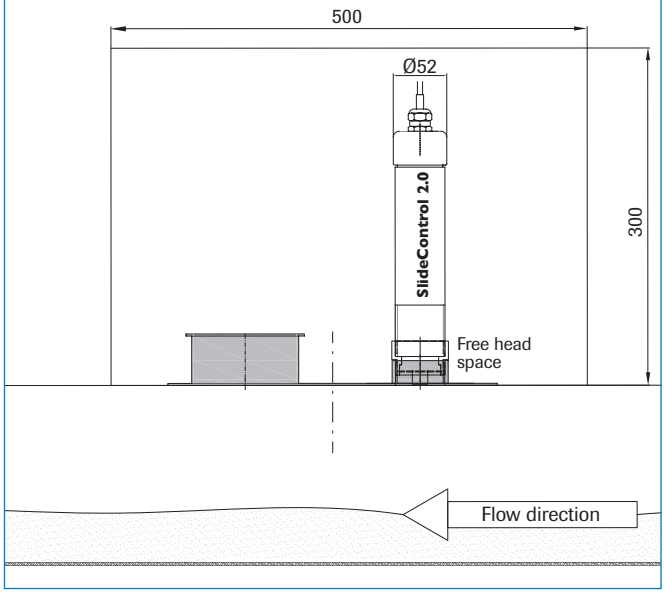


Sensor

DIN Rail transmitter



Installation

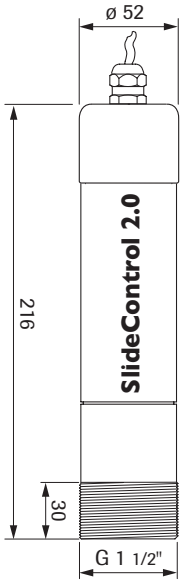


SPECIFICATIONS

SlideControl 2.0

TECHNICAL DATA

Sensor	
Housing material	Stainless steel 1.4571
Protection type	IP65
Process temperature	-20 ... +80 °C -20 ... +220 °C (with process adapter)
Ambient temperature	-20 ... +60 °C
Working pressure	Max. 1 bar
Power supply	18 ... 24 V DC / AC (powered by transmitter)
Measuring frequency	24.125 GHz; ±100 MHz
Transmitting power	Max. 5 mW
Weight	1.0 kg
Dimensions	Enclosure: length of 216 mm / diameter of 52 mm Thread: length of 30 mm / diameter of G 1½"



Transmitter (DIN Rail)	
Power supply	24 V DC ± 10 %
Power consumption	20 W / 24 VA
Protection type	IP40 to EN 60 529
Ambient operating temperature	-10 ... +45 °C
Dimensions	23 x 90 x 118 mm (W x H x D)
Weight	Approx. 172 g
DIN rail fastening	DIN 60715 TH35
Connection terminals cable cross-section	0.2 - 2.5 mm² [AWG 24-14]
Current output	1 x 4 ... 20 mA (0 ... 20 mA), load < 500 Ω
Interface	ModBus RTU (RS 485) / USB
Pulse output	Open Collector - max. 30 V, 20 mA
Relay contact	Max. rated load: 250 V AC Max. peak current: 6 A Max. rated load 230 V AC: 250 VA Max. breaking capacity DC1: 3/110/220 V: 3/0.35/0.2 A Min. switching load: 500 mW (10 V / 5 mA)
Data backup	Flash Memory

Transmitter (field housing)	
Power supply	110 / 230 V AC 50 Hz (optional 24 V DC)
Power consumption	20 W / 24 VA
Protection type	IP65 to EN 60 52910.91
Ambient operating temperature	-10 ... +45 °C
Dimensions	258 x 237 x 174 mm (W x H x D)
Weight	Approx. 2.5 kg
Interface	RS 485 (ModBus RTU) / USB
Cable screw connectors	3 x M20 (4.5 - 13 mm Ø)
Connection terminals cable cross-section	0.2 - 2.5 mm² [AWG 24-14]
Current output	3 x 4 ... 20 mA (0 ... 20 mA), load < 500 Ω
Pulse output	Open Collector - max. 30 V, 20 mA
Relay contact	Max. rated load: 250 V AC Max. peak current: 6 A Max. rated load 230 V AC: 250 VA Max. breaking capacity DC1: 3/110/220 V: 3/0.35/0.2 A Min. switching load: 500 mW (10 V / 5 mA)
Data backup	Flash Memory

ENVEA Process GmbH (Part of the ENVEA Group)
Gutedelstraße 31 - 79418 Schliengen (Germany)

☎ +49(0) 7635 827248-0 🖷 +49(0) 7635 827248-48
✉ info.process@envea.global

Visit us at:
www.envea.global