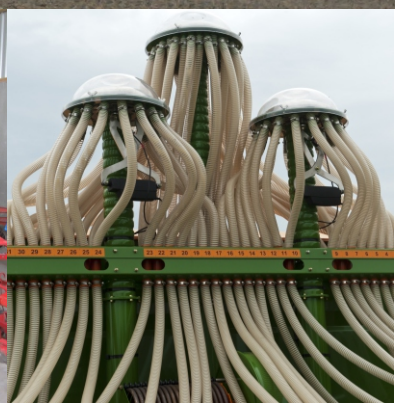
SeeDector

Measurement of amount and speed of product flow in hoses / pipes



SeeDector deploys a microwave doppler technique (”Radar”) for detecting mass flow and flow speed of particulate products in hoses / pipes - pneumatically conveyed or free falling. For many applications e.g. pneumatic seed drills und fertilizer applicators the product mass flow and flow speed are measurable first time.

- **Product flow measurement**
- Detection of product flow
- Sensor solution for detection of partial blockage in an early stage of building-up
- Measurement through plastic hoses / pipes / tubes without any design alterations
- Simple installation by clamping on
- Measurement not susceptible to dust and incrustation inside of pipes
- fully encapsulated, environment protection to IP69K
- German and European Patent pending
- US - Patent granted

SeeDector Sensor

The **SeeDector** smart sensor detects the amount and speed of flowing particulate products in hoses / pipes. The product is moving either pneumatically conveyed or free falling / flowing.

The System is based on a novel solution deploying a 24 Ghz microwave frontend. Besides the product mass flow the speed spectrum of the flowing particles can also be computed.

SeeDector is a smart sensor system with integrated digital signal processing.

Application areas are e.g. the mass flow measurement and blockage detection on pneumatic or mechanical seed drills and pneumatic fertilizer applicators.

Benefits (exemplary on pneumatic Seed Drills)

- Hi-res measurement enabling real-time detection of flow
- Smart sensor with digital signal processing and CAN Interface
- Measurement on ALL seed hoses / pipes enables detection of longitudinal and transversal seed distribution
- Early detection of partial Blockage due to reduction of flowrate and flow speed on single pipes
- Detection and monitoring of switching on and off of single pipes when tramlining
- Easy installation and retrofit on existing machines without design alterations and without components built in the conduct - no constriction, no obstruction
- Not susceptible to dust or staining inside the pipe

Technical Data:

Sensor components:	Microwave Sensor, Mikrocontroller, CAN Transceiver
Power supply:	5 VDC / 80mA max
Temperature Range:	-20 °C to +70 °C
Interface:	CAN 2.0 B
Output rate:	2 Hz
Size:	90 mm x 47 mm x 40 (72) mm (L x W x H(with clamp,less cable) cable length 1.5 m
Attachment:	on Pipe / Hose Attachment with steel plate clamp (available for different diameters)
Warranty:	2 Years

A product from:

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