

# SOLIDS FLOW METER



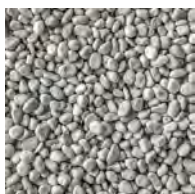
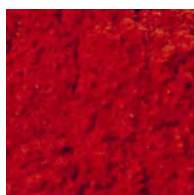
DATA SHEET

## Solids Flow Meter DYNAMIC FLOW.

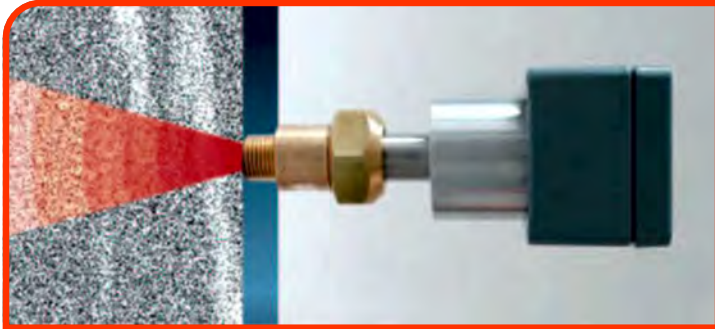
Bulk flow measurement in pipes:  
pneumatic conveying, or freefall.

Accuracy: ca.  $\pm 5\%$ .

Alternative to the former  
**Thermo** Ramsey **GMR 130** detector.



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Measuring Principle

## Measuring Principle:

DYNAMIC FLOW uses the principle of the Doppler effect. A microwave signal is emitted, thereby generating an electromagnetic field inside the pipe. The particles moving through this field generate a signal that varies in amplitude and in frequency.

The rate of flow is deduced from a mathematical analysis combined with a calibration (with real measures).

## Advantages :

Beyond the working principle, the technology developed for DYNAMIC FLOW allows the equipment to compensate for variations in:

- Particle concentration
- Speed of particles
- Grain size
- Temperature

**Better accuracy and repeatability – better long-term stability.**

- Non-contact measurement
- Easy-to-use device
- maintenance-free
- without external control unit

## Included *FLOWcontrol* software:



**Once calibrated using *FLOWcontrol*, the device runs completely autonomously, without a PC connected.**



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Application examples:

Cement



Coal



Bauxite



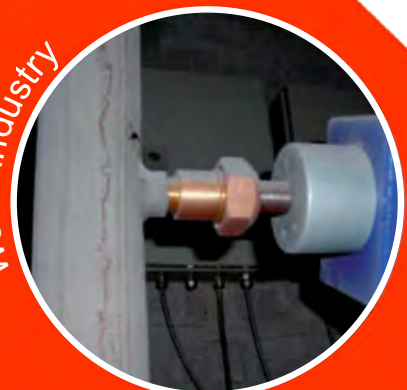
Animal feed



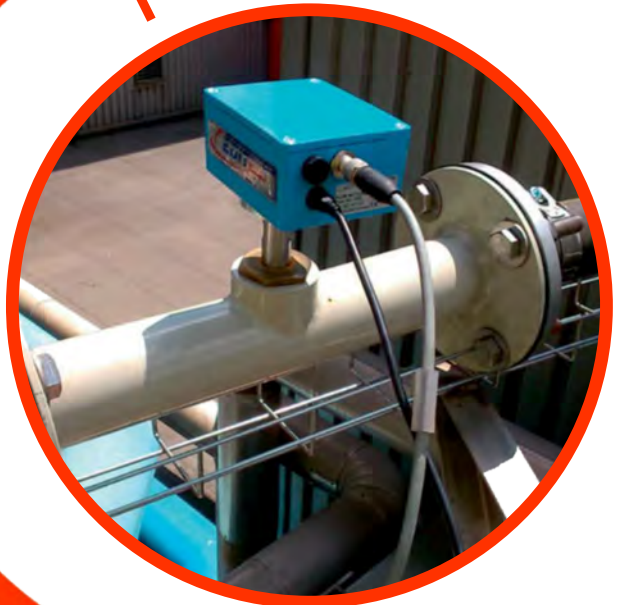
Power plant



Wood industry



FLOW



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## Technical Specifications:



Housing material:

Aluminum, painted; or stainless steel 1.4404 (depending on the model)

Dimensions:

Housing: 134 x 90 x 52 mm;

Wave guide: 150 ... 300 x Ø 20 mm  
(other lengths on request)

Weight:

1.2 kg

Protection:

IP 66

Ambient temperature:

-20 °C ... +60 °C

Product temperature:

Standard: -20 °C ... +70 °C;  
Optional: -20 °C ... +200 °C

Pressure:

< 80 bars

Outputs:

2 analogue outputs, 4 ... 20 mA, max. charge 500 Ω;  
1 pulse output for counter pulses  
(for external voltage max. 300 V AC / DC)  
Optional: MODBUS

Certifications:

Standard: CE  
Optional: ATEX II 1 / 2 D;  ta/tb IIIC T100°C Da/Db IP67

Supplied cables:

1 connection cable M12, length 5 m  
1 USB cable, length 1.8 m

Operating software:

FLOWcontrol

Software languages:

German, English, French, Hungarian, Chinese (simple)

Optional accessories:

Sight glass fitting, power supply unit, damper kit, valve set, display

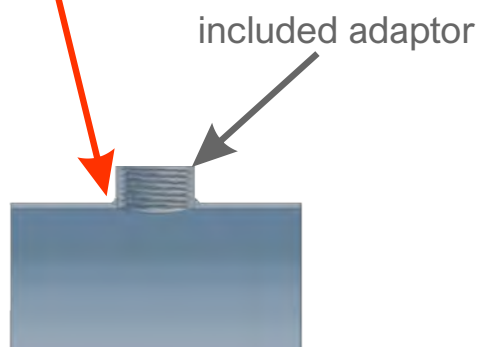


## Pipe Mount Installation:

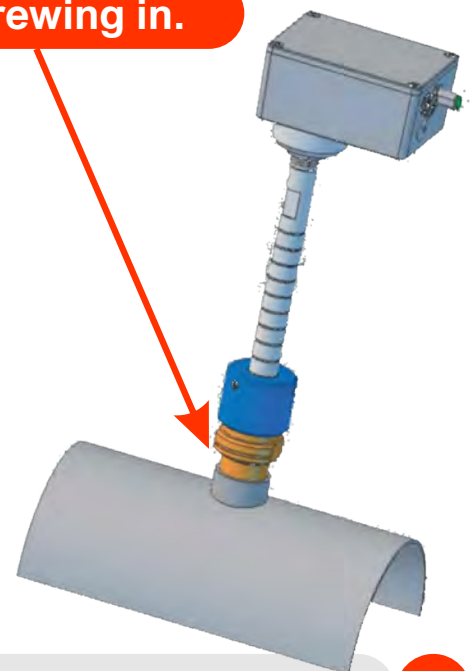
### 1) Drilling.



### 2) Welding.



### 3) Screwing in.



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*Any question?*

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