

The advancement of technology continues to drive our business forward allowing us to provide bespoke solutions to most processing sectors. We have particular experience in grain and flour processing, feed and food production, breweries and malthouses and most other continuous bulk handling activities.

Services include:

- Design of Control Systems and Build of Control Panels
- Software engineering for PLC and SCADA software
- Integration of Control and Information systems
- Electrical Wiring and Installation
- Technical Support

Products include:

- Inline NIR process analysis
- Continuous weighing and batching technology
- Moisture Measurement and regulation

Full details available on: www.suffolk-automation.co.uk

For further details and a no-obligation discussion about your process control requirements, please contact:

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Flow Controller FC3

Continuous, gravimetric dosage of free flowing bulk solids

INFORMATION SHEET



OVERVIEW:

- Hydro-pneumatic controlled flat slider with weighing sensor
- Exact regulation of flow capacity in kg/h
- Calculation of total amount in kg
- Very low installation height, easy installation directly below the silo
- Control of slider position and position presetting

Batch Controller BC3

Batch dosing of free flowing bulk solids

Application

The *Flow Controller FC3* is suited for the following applications:

- Production of grain blends by dosage from different silos, automatic recipe control
- Controlled discharge of silos for constant feeding of processing machinery
- Easy exchange of old discharging devices with low installation costs

For operation of the *Flow Controller FC3* full product stock at the inlet of the device is required.

Function

A hydro-pneumatic controlled flat slider is located in a steel housing. Under the flat slider there is a weighing sensor which measures the product flow rate. The user enters a desired flow capacity and starts dosage. The flat gate opens gradually and the product flows with increasing flow capacity over the weighing sensor. When reaching the desired flow capacity, movement stops.

Applied products

All free flowing products can be measured, e.g. grain, pulses, granules, malt, pellets, soya and diverse bruised grains.

Construction

The *Flow Controller FC3* consists of basic housing, ball bearing mounted flat gate, pneumatic cylinder, weighing sensor, load cell and electric connections. The housing is dust-tight. It is mounted at the outlet of a silo or bin.

Sizes

The following sizes are available:

| Type | Pipe diameter | Max. flow capacity approx. | Height with round outlet | Height with angled outlet |
|---------|---------------|----------------------------|--------------------------|---------------------------|
| FC3.120 | 120 mm | 20 m ³ /h | 220 mm | 135 mm |
| FC3.150 | 150 mm | 40 m ³ /h | 220 mm | 135 mm |
| FC3.200 | 200 mm | 80 m ³ /h | 305 mm | 170 mm |

The housing is made of standard steel, powder-coated in color RAL7032, the inlet pipe is round.

Integration

The device is installed with flared pipe ends. On request other pipe connections can be purchased. The device is installed at the outlet of a silo. Compressed air of at least 3 bar is required.

Accuracy

The *Flow Controller* has a measuring tolerance of 0,2 – 2 %*, depending on inlet condition, product homogeneity and flow capacity.

Control panel options

| Extern electronic type FE128 | Integrated electronic type FE710 |
|--|---|
| Available for panel mounting (24 V DC) or in wall housing (230 V AC), it can be installed independent from the dosing unit, max. 2 dosing units may be connected, with LCD-display and keypad. | Compact electronic, mounted directly at the dosing unit (24 V DC), with LED-display and keypad, easy integration via profibus interface, RS485 or analogue signals. |

