

Volumetric feed gate

MZDE



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Application

Constant volumetric proportioning system for free-flowing products

- for continuous volumetric blending
- for volumetric addition of materials
- for reaching volumetric target quantities and throughputs

with maximum accuracy and distinctive product quality advantages within your production processes.

Advantages / Features

- Low overall height
- Slide gap adjustment accurate to percentage points
- Excellent reproducibility of the slide positions selected
- Easy-to-use MEAF control system
- Self-optimizing automatic control system
- Integrated monitoring, text and alarm functions for :
 - pneumatic system (control valves, cylinders, etc.)
 - slide speed / slide position
 - detection of slide jamming by foreign objects
- Automatic zero-point correction after each closing operation
- Selection of the operating mode
 - local operator terminal
 - higher-ranking control system
 - analog PLC 0/4...20mA
 - Profibus DP
- High operating reliability
- Easy, versatile installation
- Can be combined with attachments for product inlet and outlet suiting gravity spouting with nominal widths NW 200 mm or NW 300 mm (square or circular) and outlet components suiting various chain or screw conveyors
- Approval: ATEX Zone22; II 3D EEx C 100°C

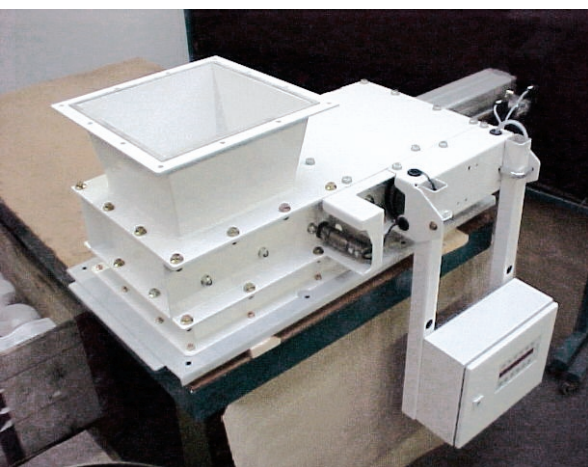
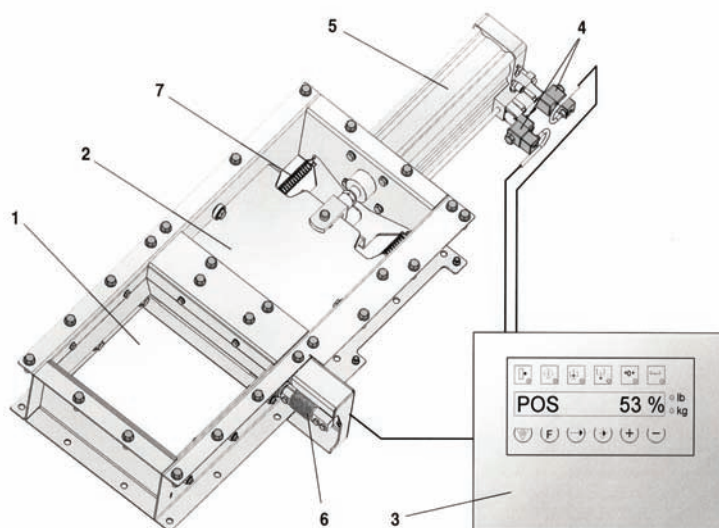
- Very low overall height
- Excellent reproducibility of slide positions selected
- Self-optimizing automatic control system
- High operating reliability
- Easy, versatile installation



Feed gate with inlet and outlet components, MEAF control system directly attached (facing up or down, as required).

Design / Mode of operation

The product is fed from surge hoppers or storage bins to the inlet (1). A pneumatically controlled feed gate (2) proportions the stream of product at the slide opening selected, expressed as a percentage. The MEAF electronics (3) monitors and controls the slide position with the aid of the control valves (4) through the pneumatic cylinder (5). The current slide position is registered by a force transducer (6), which is coupled with tension springs (7), the transducer transmits it to the MEAF control system (patent pending). The required slide position is specified directly at the unit or by remote control through a process control system using an appropriate serial or analog (option) interface signal.



Feed gate with inlet and outlet components
Pipe length: min. 500 mm
max.1800 mm

MEAF control system installed with adjustable height (facing up or down, as required).



Feed gate without inlet and outlet components
MEAF control system can be installed remotely from the slide gate (max. 10 m cable length).

Technical data, dimensions, weights

Type	Throughput t/h for wheat (loose bulk density=0.75 t/m ³)		Compr. air requirem. [NI/h]	Dimensions [mm] (slide gate without attachments for product feed or discharge and without MEAF control system)					Approx. Weights [kg] (slide gate incl. MEAF control system)			Volume by sea [m ³]
	Gravity spout. circular	Gravity spout. square		Length total	Length housing	Width total max.	Width housing	Height total	net	gross	by sea	
MZDE -200	2 – 60	2 – 65	350 (1)	1400	960	640	440	150	65	100	120	0.54
MZDE -300	5.5 – 175 (1)	5 – 200	350 (1)	1400	960	640	440	150	65	100	120	0.54

(1 Air volume drawn in by compressor, at 10 double strokes of the cylinder and an operating pressure of 6 bar

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