

PRODUCT INFORMATION





### The simple level indicator for bulk material MBA 100

### The instrument

The MBA 100 is a mechanical level detection switch for bulk material. The switching action is performed by gentle pressure of the bulk material onto the stainless steel membrane. This actuates a microswitch which triggers an electrical signal. The need for cables for power supply or other auxiliary power is eliminated. When in operation, no electricity is consumed. The MBA 100 is mounted either on the side of the container wall or slightly oblique. During the measurement, no parts protrude into the container; the MBA 100 lines up precisely with the container wall. The indicator is thus typically used for detecting overfilling at conveyor belts, transfer stations, waste pipes or bucket conve-

# Product-contacting parts made of stainless steel

All parts of the MBA 100 that come in direct contact with the bulk material are made of wear- and corrosion-resistant stainless steel. Stainless steel resists high loads and is also suitable for use in the food industry and applications involving chemicals.

### Simply install and use

The purely mechanical level indicator MBA 100 is easy to use. Neither adjustment nor calibration is necessary. The MBA 100 is simply mounted to the silo flange with 6 screws – the signal line is connected. The level indicator is read to use.

### Power supply: 0,00 V

The device does not need a power supply. Advantages: little wiring required, no power consumption.

### Flush against the silo wall

The MBA 100 membrane lines up precisely with the silo wall. No parts protrude into the container and the space requirement is minimised. This is important in many applications, including bucket elevators, conveyors, waste pipes or transfer stations. The smooth surface of the membrane also offers advantages for sensitive products: membranes used in applications involving food or chemicals can be easily and completely cleaned.

### Gentle pressure is sufficient

The switch reacts even to gentle pressure of the bulk material. 950 grams of bulk material are sufficient for the MBA 100 to respond.

### Lots of space in the terminal area

The wiring space for the connection of the signal line is large and clearly arranged. This makes the connection easy and safe. It is even easier with an optional connector.

### Device head can be positioned

The device head can be rotated – even after installation in the silo. The cable gland, for example, can be turned upside down.

### Second cable gland (optional)

The MBA 100 can be equipped with a second cable gland. This is of interest if the signals are switched in series by several devices. Wiring and distribution boxes can be saved.

# Vapour pressure equalisation membrane (optional)

The vapour pressure equalisation membrane GORE™ makes the MBA 100 tropic-proof. Moist air escapes from the electronics room: Inside, it remains dry.

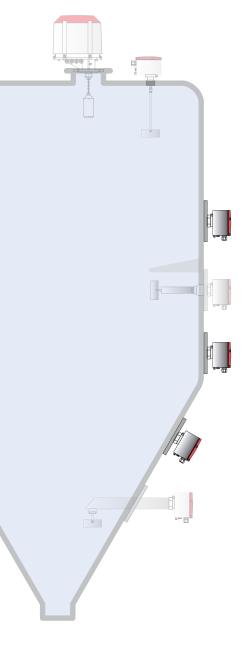
# Flexibility in dimensions and materials

We adapt the flange according to your wishes. This applies both to the flange dimension as well as the material – depending on what suits your silo best. Contact us.

## Application and installation of the MBA 100

### Your advantages as a user:

- · no power consumption
- · no adjustment necessary
- · no calibration necessary
- $\cdot \ \text{easy to use} \\$



### Typical applications

Back pressure detector, overfill protection, full-, demand-, empty-indicators for:

- · bucket conveyors
- conveyors
- · waste pipes
- transfer stations
- · silos and containers

### Feed materials

Granules, cleaning products, foundry sand, salt, gypsum, sewage sludge, powder, lime, talcum powder, pellets, feed, PVC, detergents, mud, barley, clinker brick, coal dust, marble dust, spices, quartz powder, coffee, sand, cocoa, sinter, maize, stones, malt, dry mortar, flour, cement, milk powder, rape, rice, rye, soy, beans, soy beans, starch, wheat, sugar etc.

Specifications	
Bulk materials	Free-flowing bulk materials
Sensitivity	ON: 950 g is equivalent to 6 g / cm2 OFF (switching hysteresis): 350 g is equivalent to 2 g/cm2
Temperature range	-20°C to 100°C / 200°C / 300°C
Mounting position	All positions possible
Housing	Die-cast aluminium
Protection	IP65
Dimensions (diameter/height)	203 mm / 120 mm
Membrane and flange	Stainless steel
Membrane diameter	174 mm
Flange dimension	Bolt circle 189 mm, 6 holes 7 mm
Switch	Floating changeover
Cable gland	M20x1.5, blanking plug available for a second gland.
Weight	2 kg

GROUP

#### COMPETENCE

We offer our customers our comprehensive know how obtained over decades in different applications. Our strength is to combine standards and special solutions to meet customer specifications and to find the best solution for a turn key project.

#### WORLDWIDE

Where ever you are, our global network of representatives and subsidiaries is able to supply qualified support when you need it. We deliver the equipment for your measuring tasks, provide documentation and training. Fast and competent support, short delivery times and a high level of delivery reliability – that's MBA Instruments staff is known for.

#### **COMPANY**

MBA Instruments GmbH continues in developing, production and distribution of measuring technique "Type MAIHAK" and develops new ideas. Customers are our most important partners. If our partner is satisfied only than he is able to be successful. And we are also successful with him. Satisfaction of our customers is our success.







