# Magnetic display For bypass level indicators Model BMD

WIKA data sheet LM 10.03

#### **Applications**

- Display bar for the visualisation of levels in combination with bypass level indicators
- Individual design and corrosion-resistant materials make the products suitable for a broad range of applications
- Chemical, petrochemical, natural gas, offshore, shipbuilding, machine building, power generating equipment, power plants
- Process water and drinking water treatment, food and beverage industry, pharmaceutical industry

#### **Special features**

- Measured value display by means of rollers or flaps with permanent magnets
- Medium temperatures from -200 ... +450 °C
- Splash-proof or hermetically sealed
- Without power supply
- Hermetically sealed from the process



Magnetic display

Fig. left: Plastic rollers, model BMD-SA

Fig. right: Stainless steel flaps, model BMD-FR

#### **Description**

The model BMD magnetic displays are used in combination with bypass level indicators for the display of levels. A magnetic system built into the float transmits the liquid level, contact-free, to the externally mounted display. In this are fitted, at 10 mm intervals, plastic rollers or stainless steel flaps with bar magnets. Through the directional magnetic field of the permanent magnetic system in the bypass float, the magnetic rollers or flaps, through the wall of the bypass chamber, are turned through 180°.

With this functional principle of the magnetic display, the level of a vessel is indicated as a coloured column, without power supply. An integrated T-slot serves for the fastening of further attachment parts such as scales, sensors and switches.

For selecting the optimum magnetic display (plastic rollers/ stainless steel flaps, case, scale, measuring range etc.) we offer application-related technical advice.

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#### **Model overview**

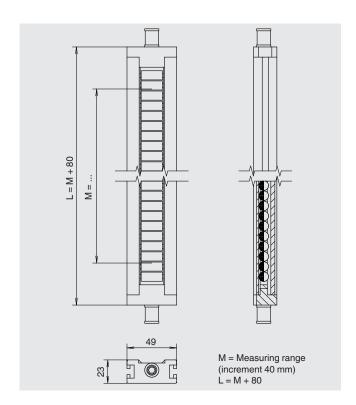
Magnetic dis- play model	Description
BMD-SA	Plastic rollers in aluminium case, with T-slot
BMD-SR	Plastic rollers in stainless steel case, with T-slot
BMD-FA	Stainless steel flaps in aluminium case, with T-slot
BMD-FR	Stainless steel flaps in stainless steel case, with T-slot
BMD-SS	Plastic rollers in stainless steel case, hermetically sealed, with T-slot
BMD-FS	Stainless steel flaps in stainless steel case, hermetically sealed, with T-slot

## **Options**

- Scale with adhesive foil
- Scale engraved aluminium
- Scale engraved stainless steel
- Scale in cm, mm or %
- Special scale
- Acrylic glass extender for insulation at low temperatures
- Purge gas connection
- Display elements in the colours red, white, black, blue and yellow (others on request)

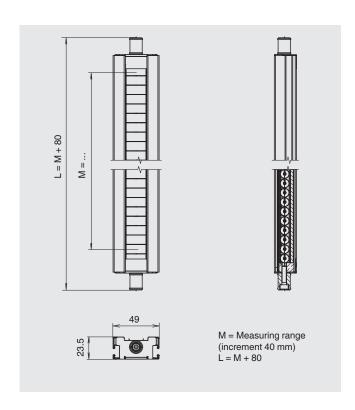
### Magnetic display, plastic rollers in aluminium case, with T-slot, model BMD-SA

Permissible temperature: -50 ... +200 °C



Specifications	
Case	Aluminium, anodised
Length L	180 6,000 mm
Display element	Plastic rollers, PBT, red/white
Indicator window	Polycarbonate
Ingress protection	IP65 per IEC/EN 60529

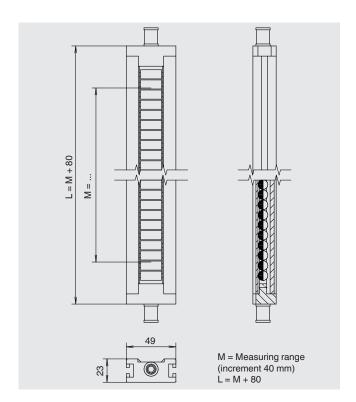
# Magnetic display, plastic rollers in stainless steel case, with T-slot, model BMD-SR Permissible temperature: -50 ... +200 $^{\circ}$ C



Specifications	
Case	Stainless steel
Length L	180 6,000 mm
Display element	Plastic rollers, PBT, red/white
Indicator window	Polycarbonate
Ingress protection	IP65 per IEC/EN 60529

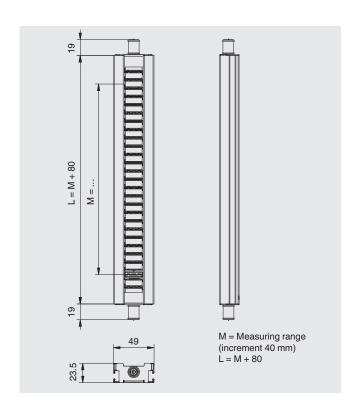
### Magnetic display, stainless steel flaps in aluminium case, with T-slot, model BMD-FA

Permissible temperature: -200 ... +450 °C



Specifications	
Case	Aluminium, anodised
Length L	180 6,000 mm
Display element	Stainless steel flaps, red/white
Indicator window	Glass
Ingress protection	IP65 per IEC/EN 60529

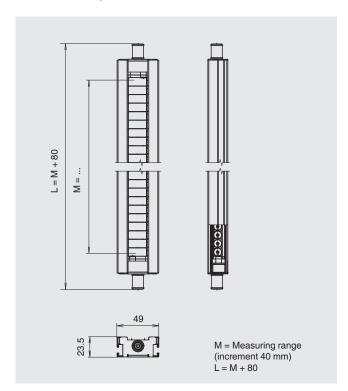
# Magnetic display, stainless steel flaps in stainless steel case, with T-slot, model BMD-FR Permissible temperature: -200 ... +450 $^{\circ}$ C



Specifications	
Case	Stainless steel
Length L	180 6,000 mm
Display element	Stainless steel flaps, red/white
Indicator window	Glass
Ingress protection	IP65 per IEC/EN 60529

# Magnetic display, plastic rollers in stainless steel case, with T-slot, hermetically sealed, model BMD-SS

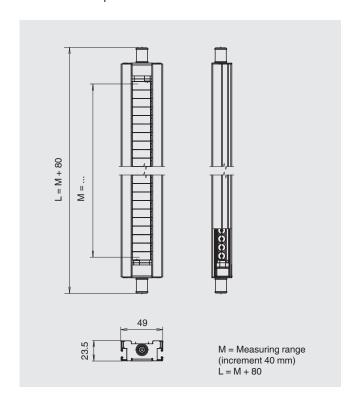
Permissible temperature: -170 ... +200 °C



Specifications	
Case	Stainless steel
Length L	180 6,000 mm
Display element	Plastic rollers, PBT, red/white
Indicator window	Polycarbonate profile, argon gas- filled, hermetically sealed
Ingress protection	IP68 per IEC/EN 60529

# Magnetic display, stainless steel flaps in stainless steel case, with T-slot, hermetically sealed, model BMD-FS

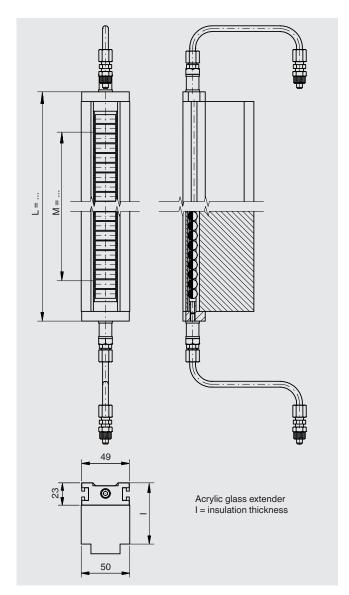
Permissible temperature: -170 ... +200 °C



Specifications	
Case	Stainless steel
Length L	180 6,000 mm
Display element	Stainless steel flaps, red/white
Indicator window	Polycarbonate profile, argon gas-filled, hermetically sealed
Ingress protection	IP68 per IEC/EN 60529

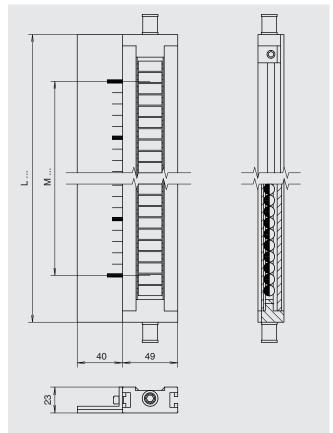
### **Option**

With acrylic glass extender and purge gas connection (with bypass chamber insulation)



### **Option**

Scale (adhesive foil, aluminium or stainless steel)
Aluminium with adhesive foil, cm-graduation
max. ambient temperature for the adhesive foil: 100 °C
Aluminium or stainless steel engraved, graduation selectable



#### **Ordering information**

Model / Measuring range / Options

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The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

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WIKA Alexander Wiegand SE & Co. KG

Alexander-Wiegand-Straße 30 63911 Klingenberg/Germany Tel. +49 9372 132-0

Fax +49 9372 132-406 info@wika.de www.wika.de