

# Magnetic display

## For bypass level indicators

### Model BMD

KSR 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

#### 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.



#### Magnetic display

Fig. left: Plastic rollers, model BMD-SA

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

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.

## Model overview

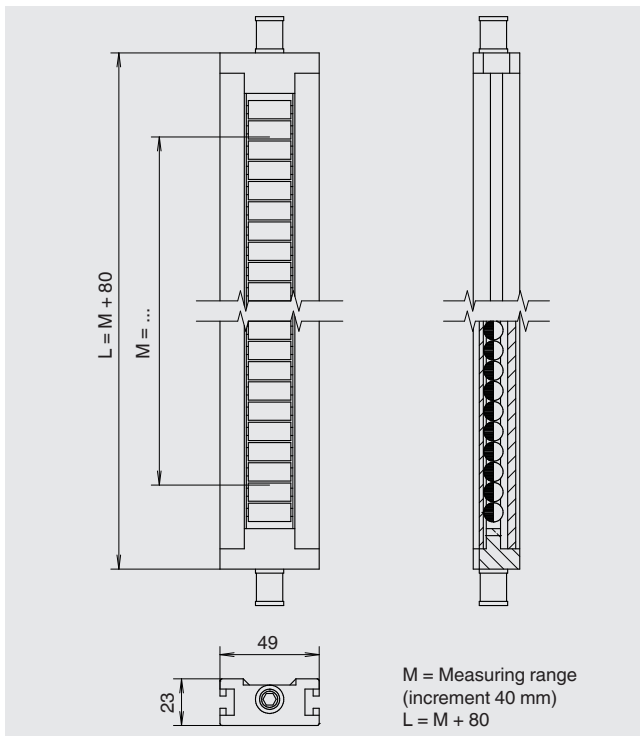
Magnetic display model	Description
<b>BMD-SA</b>	Plastic rollers in aluminium case, with T-slot
<b>BMD-SR</b>	Plastic rollers in stainless steel case, with T-slot
<b>BMD-FA</b>	Stainless steel flaps in aluminium case, with T-slot
<b>BMD-FR</b>	Stainless steel flaps in stainless steel case, with T-slot
<b>BMD-SS</b>	Plastic rollers in stainless steel case, hermetically sealed, with T-slot
<b>BMD-FS</b>	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

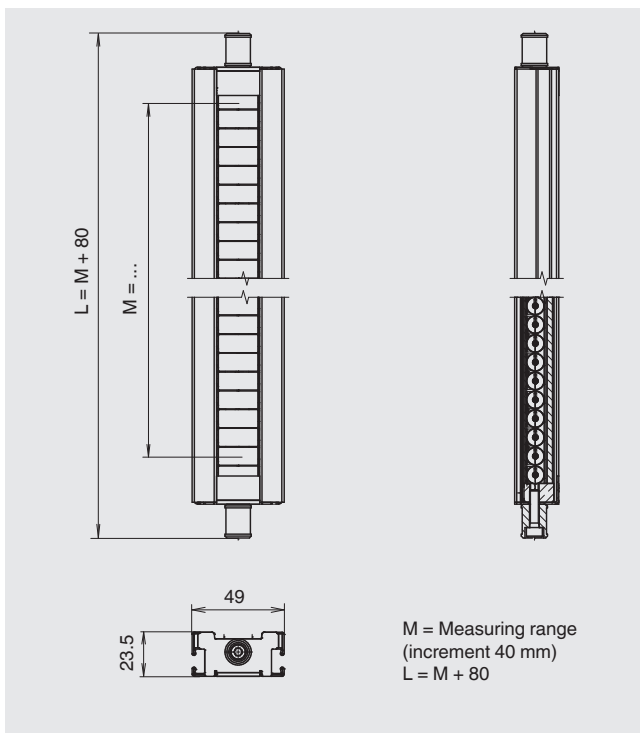


### Specifications

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

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

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

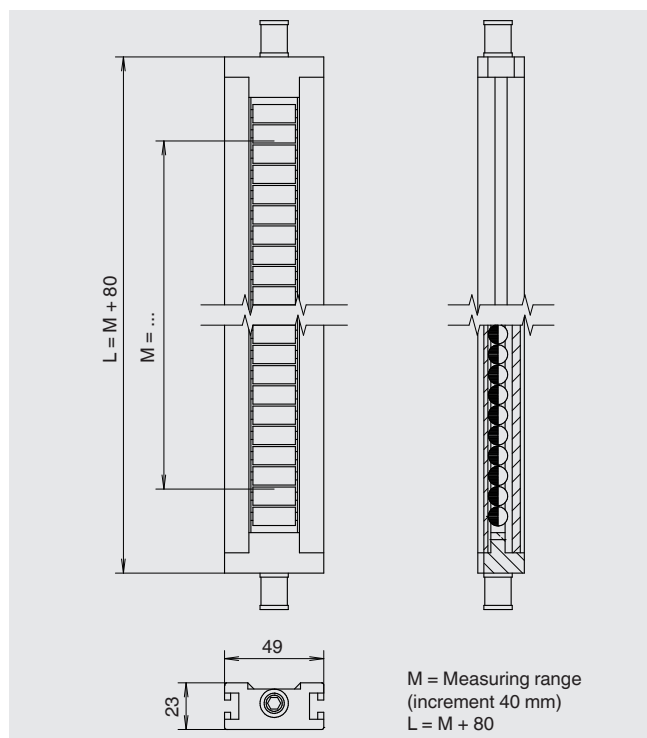


### Specifications

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

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

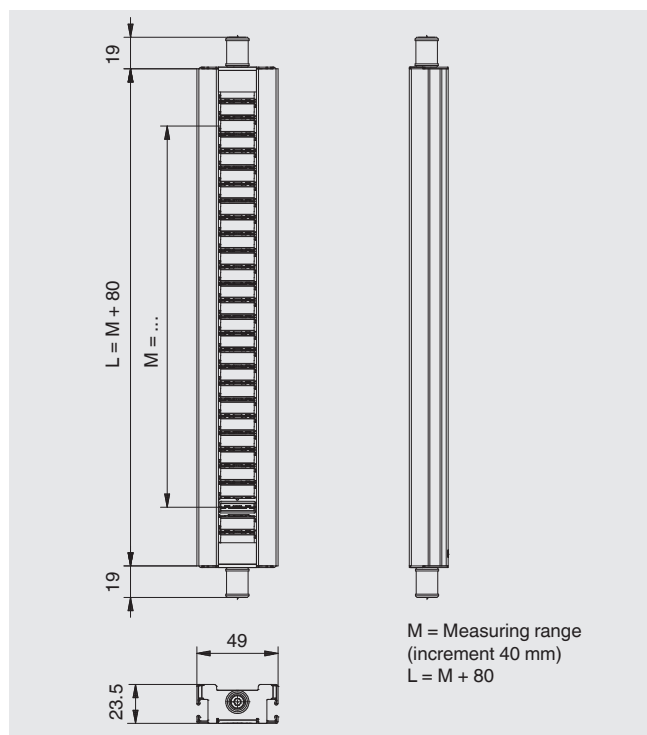
Permissible temperature: -200 ... +450 °C



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

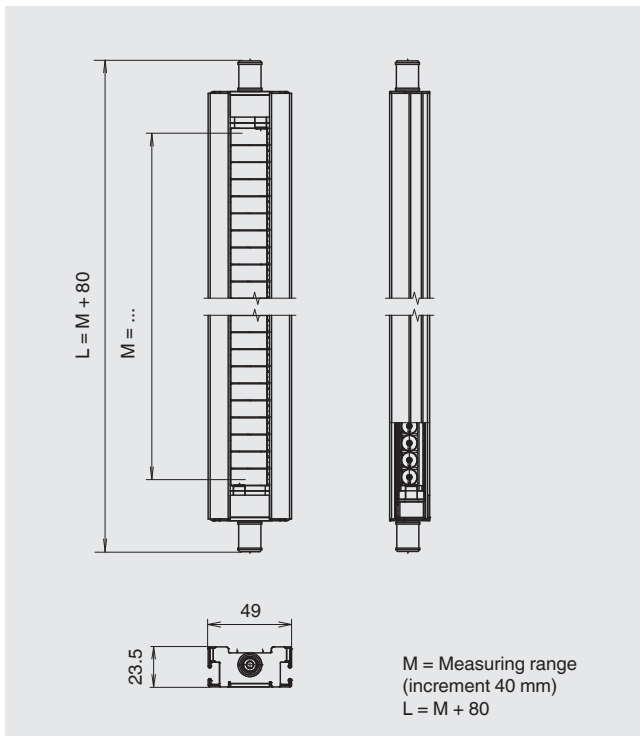
Permissible temperature: -200 ... +450 °C



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

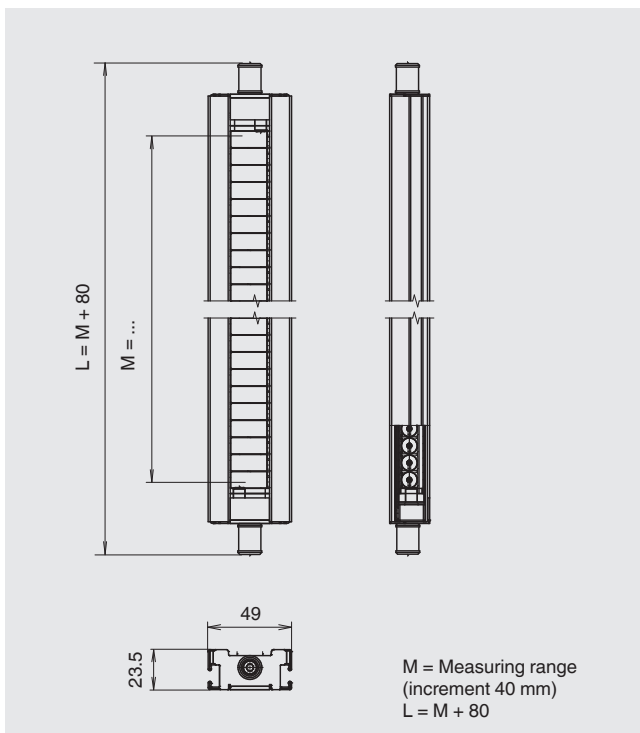
Permissible temperature: -170 ... +200 °C



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

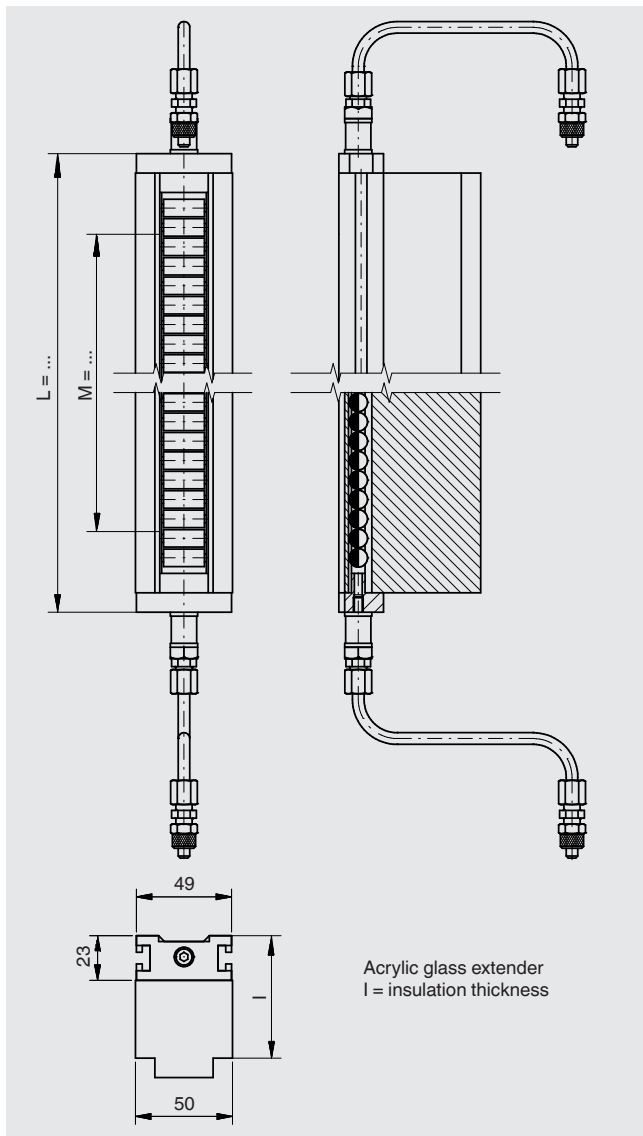
Permissible temperature: -170 ... +200 °C



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

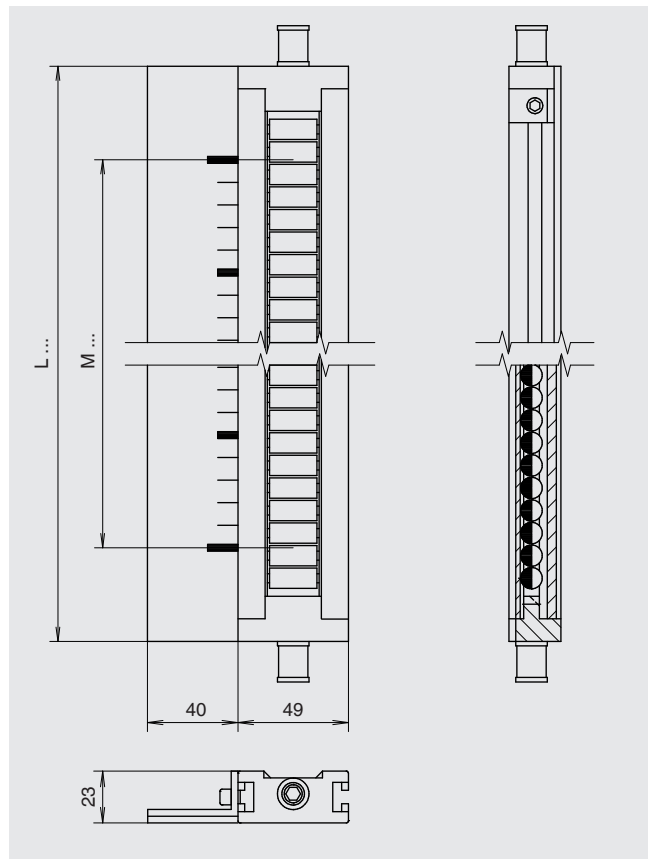
## Option

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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