

BM26A-1000 Technical Datasheet

# Magnetic Level Indicator for basic liquid applications

- Most competitive price
- Process conditions up to +200°C (+392°F) / 40 barg (580 psig)
- Level indication up to 5.5 m / 18 ft (other dimensions on request)







#### 2.1 Technical data

- The following data is provided for general applications. If you require data that is more relevant to your specific application, please contact us or your local sales office.
- Additional information (certificates, special tools, software,...) and complete product documentation can be downloaded free of charge from the website (Downloadcenter).

## 2.1.1 BM26A-1000 magnetic level indicator

#### Measuring system

Measuring principle	Magnetic level indicator - bypass chamber (principle of communicating tubes). A float in the measuring chamber (Ø42 mm × 2 mm / NPS 1 1/4 pipe) is magnetically coupled to a mechanical level indicator.
Application range	Level indication of liquids in applications from vacuum up to 40 barg / 580 psig
Measured value	
Primary measured value	Level of the float magnets in the measuring chamber
Secondary measured value	Level or volume of the liquid in the tank

#### Design

Measuring chamber variants	Side / side process connections	
	Axial / axial process connections	
	Bottom axial / top side process connections	
	Bottom side / top axial process connections	
Options	LT40 reed-chain level transmitter without LCD indicator module with a compact or a remote housing ①	
	LT40 reed-chain level transmitter with LCD indicator module with a compact or a remote housing ①	
	Anti-icing cover for glass indicator tube	
	Bistable limit switches ②	
Measuring range (ML)	0.35.5 m / 118 ft (longer on request)	
Display and user interface	Display and user interface	
Display	Indicator column with magnetically coupled rotating flaps that have two colors: yellow/black; red/white	
Float failure indication (at the bottom of the indicator column)	Orange flaps	
Scale marking options	No scale; m + cm; mm; ft + inches; customized volume units; % (simplified) ③	

#### Measuring accuracy

Accuracy	±10 mm / 0.4"
Repeatability	±10 mm / 0.4" (when density is constant)
Maximum rate of change	20 mm/s / 0.787"/s

## Operating conditions

Temperature	
Process temperature	-70+200°C / -94+392°F (Ex: see supplementary instructions or approval certificates)
Ambient temperature	-70+80°C / -94+176°F (Ex: see supplementary instructions or approval certificates)
Storage temperature	-70+80°C / -94+176°F
Pressure	
Process pressure	-140 barg / -14.5580 psig ④
Chemical properties	
Density	7001200 kg/m³ / 43.774.91 lb/ft³. Higher density on request.
Viscosity	≤ 500 mPa·s / ≤ 500 cP
Other conditions	
Ingress protection (IEC 60529)	Indicator column: IP66 / IP68 (0.15 barg)

#### **Materials**

Measuring chamber	Stainless steel (1.4404 / 316L)
Float	Stainless steel (1.4404 / 316L); titanium
Indicator column rail	Stainless steel (1.4401 / 316)
Indicator column tube	Borosilicate glass 3.3 (agrees with ISO 3585) – hermetically sealed tube
Scale (option)	Stainless steel (1.4401 / 316)
Process connection	Stainless steel (1.4404 / 316L)
Gasket options	Aramid; graphite; PTFE
Anti-icing cover	PLEXIGLAS® (option for glass indicator column tube) - when the liquid temperature is -70+0°C / -94+32°F

#### **Process connections**

Threaded pipes	1/23/4 NPT (male); G 1/23/4 (male)
Welded pipes, ASME	NPS 1/21 in Sch10S ⑤
Flange options	
EN	DN1550 (Type B1) in PN40
ASME	NPS 1/22 (RF) in Class 150 / 300 ⑤

### Drain and vent connections

Drain options	
Thread	Without; G 3/81/2 (female) with plug; 3/81/2 NPT (female) with plug
Flange	All process connection options
Vent options	
Thread	Without; G 3/81/2 (female) with plug; 3/81/2 NPT (female) with plug
Flange	All process connection options

#### Power supply

Limit switches	Refer to the technical data for the MS15 series and MS40 series
Reed-chain level transmitter	Refer to the technical data for the LT40

#### Input and output

Parameter	Level detection or indication
Output signal	Refer to the technical data for the LT40 reed-chain level transmitter and the MS15-series and MS40-series limit switches

#### Approvals and certification

CE/UKCA	The device meets the essential requirements of the EU Directives and UK Regulations. The manufacturer certifies successful testing of the product by applying the CE or UKCA marking.
	For more data about the European Standards and UK Designated Standards related to this device, refer to the EU and the UKCA Declarations of Conformity. You can download this document free of charge from the website (Download Center).
Explosion protection	
ATEX	II 1/2 G Ex h IIC T6T3 Ga/Gb or II 2 G Ex h IIC T6T3 Gb
IECEx	Ex h IIC T6T3 Ga/Gb or Ex h IIC T6T3 Gb
UKEX – pending	II 1/2 G Ex h IIC T6T3 Ga/Gb or II 2 G Ex h IIC T6T3 Gb
Other standards and approvals	
Pressure	EU Pressure Equipment Directive
	UK Pressure Equipment (Safety) Regulations
Vibration resistance	EN 60721-3-4 - vibration class 4M4 (1200 Hz:1g, 15g shock ½ sinus: 6 ms)
Construction code	Standard: EN 13445
	Option: NACE MR0175 / MR0103 / ISO 15156

#### Table 2-1: BM26A-1000: technical data

- ① For more data, refer to technical data for the LT40 reed-chain level transmitter in this section
- ② For more data, refer to technical data for the MS15-series and MS40-series limit switches in this section
- ③ If the scale adjacent to the indicator column has % (simplified) units, then it has a range of 0...100% with an increment of 10% between each marking
- The maximum pressure is related to the type of process connection, pressure rating and the process temperature. For more data about 316-316L stainless-steel measuring chambers, refer to the "Maximum process pressure: measuring chamber" section in this chapter.
- (5) NPS = Nominal Pipe Size. For more data about the dimensions of flanges, refer to the ASME B16.5 standard. For more data about the dimensions of welded pipes, refer to the ASME B36.19M standard.