# Dial type level gauge LBA $LBA / Lemon^{TM} / Ex$

#### **Application**

Float gauges LBA are designed to measure level of liquids in storage tanks, including measuring in explosive environments.

The dial gauge is a mechanical-electronical instrument with modular construction which allows to create the whole range of different types as required by customer needs.

#### **Functional description**

- selectable measuring range
- local representation of level by circle dial
- selectable head type
- selectable output signal
- optional up to 4 limit microswitches
- Exi/Exd version
- selectable material of wetted parts
- selectable float type
- selectable connection flange, threaded joint ...

#### Technical data

- measuring range up to 15 m
- circle dial with two pointers
- head LBH170 Ø 170mm/ h 220mm LBH250 - Ø 250mm/ h 175mm
- output 100 ohm resistance
  R/I 4-20 mA
  R/U 0-10 V
- 4 limit microswitches
- Ex version according to EU 94/9/ES ATEX
- material version SS/PP/PVDF
- floats for mass density of liquid from 0.4kg/dm3
- standard connection flange DN50 PN16
- temp. at the measurement point -150 až 350°C
- housing protection IP65

#### Certification

■ EC declaration of conformity







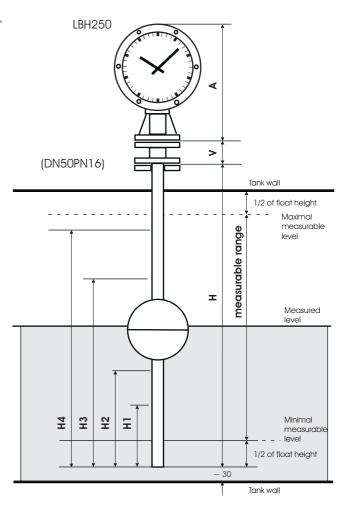
#### **Head type**





LBH170 Lemon

#### **Overall dimensions**



# Dial type level gauge LBA LBA / Lemon<sup>™</sup> / Ex

## Specification table

LBA-	XX.	Χ	Χ.	Х	Χ		
	01.	Χ	X.	Х	Х	up to 5 m	dial local indication range
	02.	Χ	Χ.	Х	Х	up to 10 m	
	03.	Χ	Χ.	Χ	Х	up to 20 m	
		0	X.	Х	Х	0	number of limit microswitches
		2	Χ.	Х	Х	2	
		4	Χ.	Χ	Х	4	
			0.	Х	Х	without	limit microswitches
			1.	Χ	Х	with	
				3	Х	standard environment	standard environment version
				9	Х	standard environment	according to the agreement
					0	standard environment	no electrical output
					1	standard environment	output signal 4 to 20 mA, two wire
					2	standard environment	output signal (0) 4 to 20 mA, four wire
					3	standard environment	output signal 0 to 10 V, four wire
					4	standard environment	output signal 0-100R
					5	standard environment	output signal 0-1000R
					9	standard environment	according to the agreement

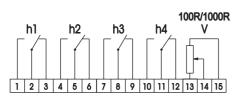
Integral part of the order is also filled-in questionnaire available separately.

### Specification table for Ex version

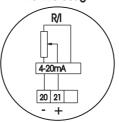
LBA-	XX.	Χ	Χ.	Χ	Χ.	Ex	
	01.	Χ	X.	Х	Х	up to 5 m	dial local indication range
	02.	Χ	X.	Χ	Χ	up to 10 m	
	03.	Χ	X.	Χ	Χ	up to 20 m	
		0	X.	Χ	Χ	0	number of limit microswitches
		2	X.	Χ	Χ	2	
		4	X.	Χ	Χ	4	
			0.	Χ	Χ	without	limit microswitches
			1.	Χ	Χ	with	limit microswitches EExi
			2.	Χ	Χ	with	limit switches EExi
			3.	0	Χ	with	limit microswitches EExd
				1	Х	zone 1	Head version for zone 1 ( EExi built-in components
							are connected to external explosion proof
							equipment )
				2	Х	zone 2	Head version for zone 2 ( EExi built-in components
							are connected to external explosion proof
							equipment )
					0	zone 1	no electrical output
					1	zone 1	output signal 4 to 20 mA, two wire EExi
					2	zone 2	output signal 4 to 20 mA, four wire EExi
					3	zone 1	output signal 4 to 20 mA, two wire EExd
					4	zone 1	output signal 0-100R or 0-1000R EExd

Integral part of the order is also filled-in questionnaire available separately.

# Schematic diagram



Two wire design



Four wire design

