

MINING ▶ LEVEL

LEVEL-EX

DESCRIPTION



Robust and safe level meter for general mining applications

The measuring device can be used for the following measuring tasks:

- Continuous, non-contact level measurement in silos, tanks, bunkers or on conveyor belts
- Determination of the contents (volume or mass) of silos, tanks or bunkers

The remote transducer LEVEL-EX-S* is connected to the evaluation and display unit LEVEL-EX-A* with a special connection cable (max. 100 m). The connection cable is not part of the package and has to be ordered separately.

Your benefits

- Quick and simple commissioning via menu-guided on-site operation with four-line, multilingual plain text display
- Envelope curves on the on-site display for simple diagnosis
- Integrated temperature sensor for automatic correction of the temperature dependent sound velocity
- Linearization function (up to 32 points) for conversion of the measured value into any unit of length, volume or flow rate
- Non-contact measurement method minimizes service requirements

- Measuring range:
 - Maximum 10 m (solids)
 - Maximum 20 m (liquids)
- Protection (according to EN 60529): IP65
- Power supply:
 - LEVEL-EX-A*1A* and -A**B* with LEVEL-EX-S1A*: 9.0 ... 13.5 VDC
 - LEVEL-EX-A**B* with LEVEL-EX-S1B*: 10.0 ... 13.5 VDC
 - LEVEL-EX-A**B* with LEVEL-EX-S1D*: 11.0 ... 13.5 VDC
 - LEVEL-EX-A*3A*: 11.0 ... 13.5 VDC
- Signal outputs:
 - Frequency 5 ... 15 Hz or Current 4 ... 20 mA
 - Optocoupler (limit and alarm, max. 13.5 VDC)
- Electrical connection:
 - Cable gland
 - Connector (optional):
 - PROMOS BN 4160
 - Machaczek ME2A10
 - Souriau series 845 size 1
 - Souriau series 845 size 2
 - Hydrostar SKK24
 - Hydrostar SKK45M
 - Hirschmann G4A5M
 - M12
- Material:
 - Glasfibre-reinforced polyester, graphite added
- Weight:
 - Approx. 2 kg for every unit
- Approval:
 - ATEX

A complete description of all device features can be found in the corresponding operating manual ba056000en.

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ORDER CODE
Evaluation and display unit LEVEL-EX-A

10	Electrical connection
A	2x Cable gland
B	1x PROMOS connector type BN 4160 * ¹
C	1x Machaczek connector ME2A10 * ¹
D	1x Souriau connector series 845, size 1 * ¹
E	1x Souriau connector series 845, size 2 * ¹
F	1x Hydrostar connector SKK24 * ¹
G	1x Hirschmann connector type G4 * ¹
H	1x Circular connector M12 * ¹
J	1x Hydrostar connector SKK45 * ¹
Y	Special version, to be specified
	* ¹ additionally 1x cable gland each
20	Output signal
1	Frequency 5 ... 15 Hz + optocoupler output * ²
3	Current 4 ... 20 mA + optocoupler output * ²
9	Special version, to be specified
	* ² Output function: limit and alarm
30	Potential separation
A	Output not potential-separated
B	Output potential-separated
Y	Special version, to be specified
40	Mechanical version
1	Standard
9	Special version, to be specified
50	Special equipment
A	Standard
Y	Special version, to be specified

Transducer LEVEL-EX-S

10	Device version
1	Ultrasonic
9	Special version, to be specified
20	Measuring range
A	Max. 2.0 m (Solids) or 5.0 m (Liquids)
B	Max. 3.5 m (Solids) or 8.0 m (Liquids)
D	Max. 10 m (Solids) or 20 m (Liquids)
Y	Special version, to be specified
30	Mechanical version
1	Standard
9	Special version, to be specified
40	Special equipment
A	Standard
Y	Special version, to be specified

Complete order code	10	20	30	40	50
Evaluation and display unit LEVEL-EX-A					
Transducer LEVEL-EX-S					

Note on the scope of delivery

The connection cable (max. 100 m) is not part of the package and has to be ordered separately.

The following pre-fabricated connection cables are available:

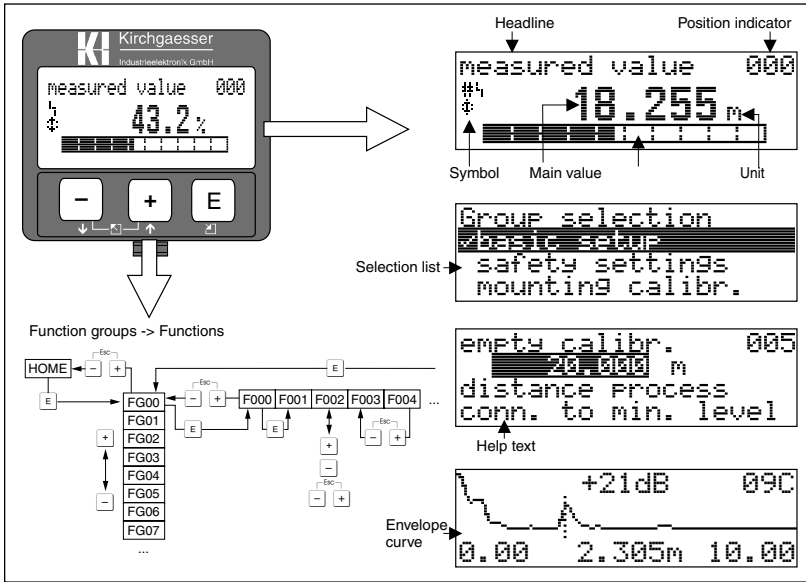
- VLH-005 (5 m)
- VLH-010 (10 m)
- VLH-020 (20 m)
- VLH-050 (50 m)
- VLH-100 (100 m)

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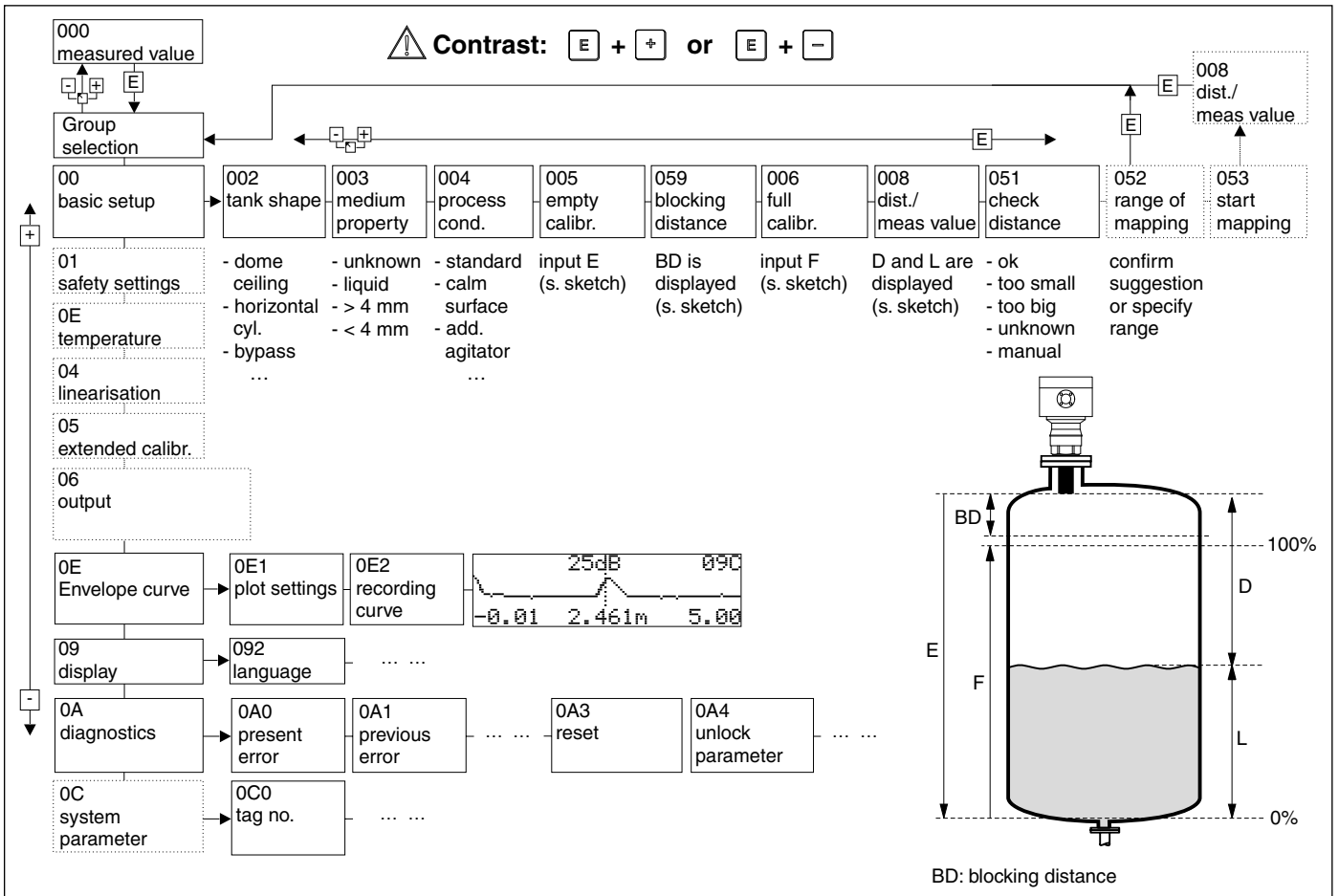
LEVEL-EX

FEATURES

- Graphical LC display for indication of the measured value and for easy commissioning



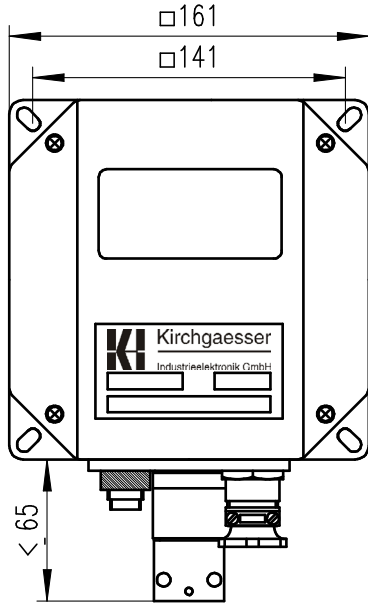
- Extensive programmable functions to adapt the LEVEL-EX to the measuring task, for example safety settings, linearization, extended adjustment and diagnosis



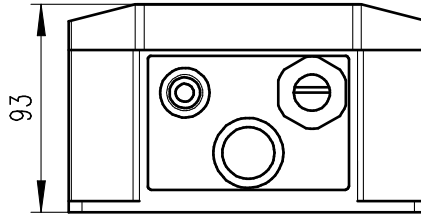
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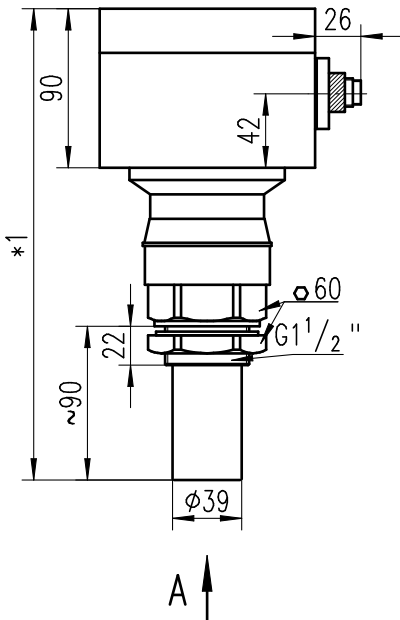
DIMENSIONS



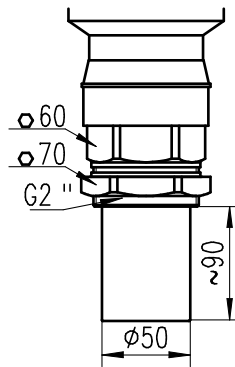
LEVEL-EX-A



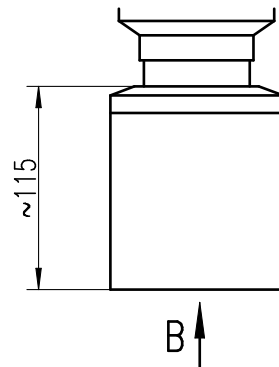
LEVEL-EX-S1A



LEVEL-EX-S1B



LEVEL-EX-S1D



*1
~270 (LEVEL-EX-S1A/-S1B)
~250 (LEVEL-EX-S1D)

