

The CDL-Level Sensor is an especially designed pressure sensor for well measurement. It will be connected directly to the analogue input of the CD-Logger. The CDL-FS is powered by the CD-Logger.

Application

Level control
Level measurement
Potable and waste water measurement

Technical Data

The data are only valid corresponding to a CD-Logger

Measuring range

for water with ca. 3...10°C : Water gauge 0...10 m (0 ... 0.98 bar)
Resolution : 1000 steps per 10m
Overload capability : 20 mWs (ca. 2 bar)

Deviation

due to fluctuation
of ambient temperature : typ. $\pm 1\text{cm}$, max. $\pm 2\text{cm}$ in the compensated range
of water temperature : $-0.2\text{cm}/^\circ\text{C}$ at 10m WG ($-0.02\text{cm}/^\circ\text{C m}$)
of response curve of sensor : max $\pm 2.5\text{cm}$ deviation from the best line

Adjustment

Zero : $\pm 2\%$ of maximum value ($\pm 20\text{cm}$)
Gain : $\pm 1.5\%$ of actual value ($\pm 15\text{cm}$ at 10mWG)

Temperature

Storing temperature: $-30^\circ\text{C}...+80^\circ\text{C}$

Working temperature

within compensated range : $0^\circ\text{C}...25^\circ\text{C}$
Signal amplifier : $-25^\circ\text{C}...70^\circ\text{C}$
CD-Logger : $-20^\circ\text{C}...70^\circ\text{C}$ (reading $0..50^\circ\text{C}$)

Dimensions

Sensor head diameter : ca. 25mm
Sensor cable $\varnothing \times L$: ca. 6mm x 15m
Signal amplifier LxBxH : ca. 110 x 50 x 35mm
Signal cable $\varnothing \times L$: ca. 4mm x 1m

Weight : ca. 1kg

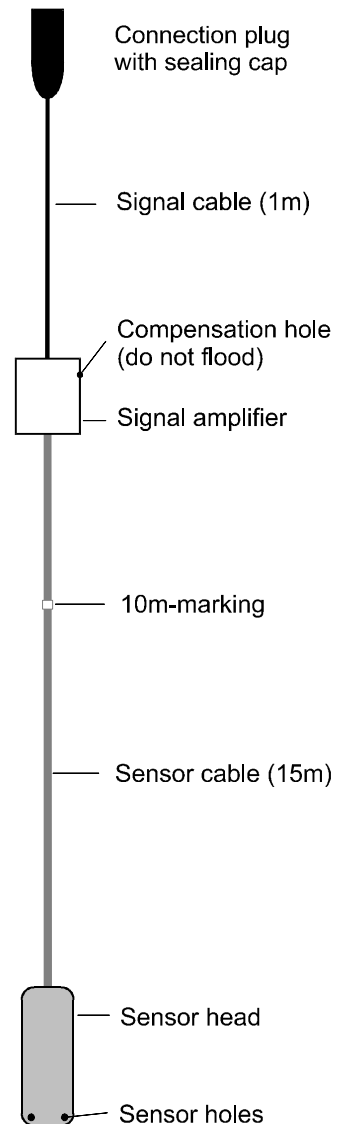
Protection : IP 68 sensor head and sensor cable

Pressure compensation : through the sensor cable

Power supply of the sensor : CD-Logger

Order number : 11 63 39

Accessories or further designs with various measuring ranges or cable length on request



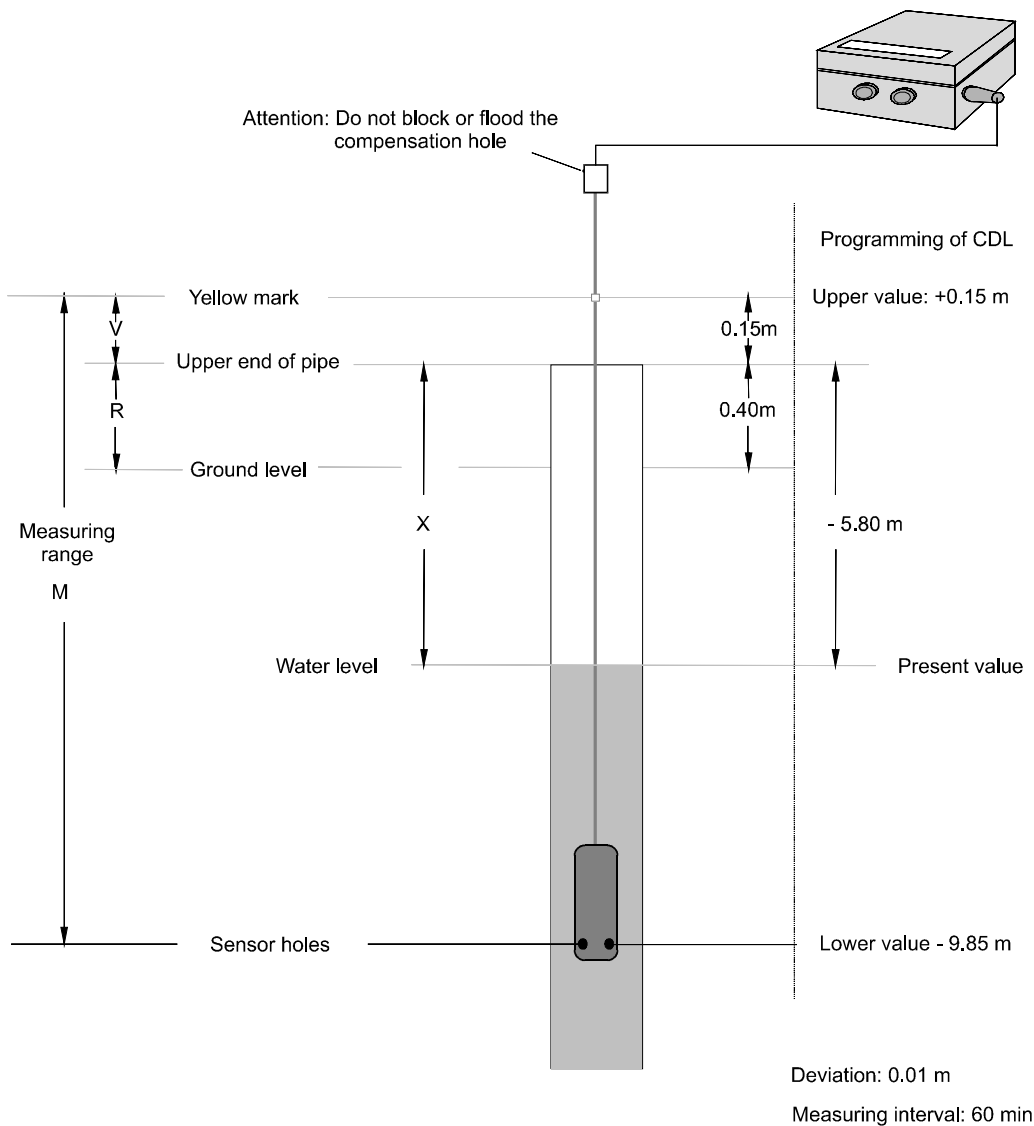
Sensus Metering Systems GmbH

Hannover D-30880 Laatzen • Meineckestr. 10
Weitere Informationen unter <http://www.sensus.com>

Installation of CDL-Level Sensor

Example for programming

The measurement has -as usual at well level measurement- the zero point at the upper end of the well pipe. The measurement is done from the top to the bottom. The mentioned values are examples.



Notice

- The pressure compensation has to be ensured. Therefore do not flood or block the compensation hole in the signal amplifier box
- Do not install the signal amplifier in a pressure safe housing
- Do not buckle or pinch the sensor cable
- After installation the pressure and temperature compensation takes time up to 30 min. After this period the measurement is stabil.
- For testing of the sensor calibration the present value can be compared with a second measurement (e.g. cable reel depth gauge). For this purpose the present value can be displayed on the LCD of the Logger.

Changes without notice

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