

WATER LEVEL / WELL PROBE TANK CONTENTS MEASURING PROBE



FOR SIMPLE AND INEXPENSIVE APPLICATIONS



MAXALARM

MIN MAX

GBS 01

Art. no. 603059

Water level / well probe

Application:

Suitable for permanent level measuring in tanks, rivers, lakes, drinking-water wells, drilling holes, waste water plants...

GBS 02

Art. no. 603146

Tank contents measuring probe for difficult measuring conditions

General:

Piezoresistive pressure sensor with temperature compensation. Welded, non-corrosive design with integral and additionally sealed water-proof connecting cable. The pressure compensation is done via a cable-integrated air path to the atmosphere. A special feature of GBS 02 is the lateral flow resistance, which prevents media ingress.

Application:

For measuring the level of fuel and other aggressive media. The sensor is highly precise, insensitive to lateral flow and offers optionally lightning protection and other output signals (e.g. 0 ... 10 V). For measuring of gasoline please order Ex-design.

Specifications:

Measuring ranges:	0.1 bar (100 mbar) ... 10 bar = 1 ... 100 m water column
Available ranges:	0.1 (GBS 02 only), 0.25, 0.4, 0.6, 1, 1.6, 2.5, 4, 6, 10
Overload (bar):	1 2 2 3 5 8 8 10 10 10
Output signal:	4 ... 20 mA (Option: 0 ... 10 V only for GBS 02)
Permissible impedance:	4 ... 20 mA: $R_A [\Omega] < (U_v [V] - 10 V) / 0.02 A$
Permissible load:	0 ... 10 V: $R_L [\Omega] > 100 k\Omega m$
Auxiliary energy:	10 ... 30 V DC (14 ... 30 V DC at 0 ... 10 V)
Accuracy:	accuracy (% of span):
GBS 01:	≤0.5 setting of cut-off point) resp. ≤0.25 (BFSL)
GBS 02:	accuracy (% of span): ≤0.25 (setting of cut-off point) resp. ≤0.125 (BFSL); (at 0.1 bar: ≤0.5 setting of cut-off point) resp. ≤0.25 (BFSL)
Hysteresis (% of span):	≤0.1
Repeatability (% of span):	≤0.05
Stability per year (% of span):	≤0.2 (at reference conditions)
Operating temperature:	-10 ... +50 °C (GBS 01) or -10 ... +85 °C (GBS 02)
Temperature coefficient (% of span):	≤0.02 / K (for meas. range >0.4 bar)
Filling:	KN77, food safe
Housing:	Chromium-nickel alloy 1.4571. Male thread G 1/2" accessible after removal of plastic protection cap.
Probe dimensions:	Ø 27 mm, length of metal body: approx. 100 mm (GBS 01), approx. 147 mm (GBS 02), cable Ø approx. 7.5 mm
Connection:	10 m stationary casted PUR cable (GBS 01) resp. FEP-cable (GBS 02), loose ends. Glass-fibre screen protects cable against tearing. (Extra long cable against upcharge - please specify when ordering)

Options GBS 01:

extra long connection cable (PUR)
till max. 300 m

Options GBS 02:

extra long connection cable (FEP, teflon)
till max. 100 m

Output signal 0 ... 10 V

Lightning protection, Ex-protection, meas. range 16 and 25 bar

CO₂-TRANSDUCER



HIGHLIGHTS:

- excellent long term stability
- auto-calibration procedure
- for surveillance of the recommended CO₂ concentration in ambient air
- output signal free scaleable

GT10-CO2-1R

Art. no. 602599

CO₂-Transducer

General:

Due to the fact, that CO₂ is an important indicator for the quality of air in rooms, it's super important to measure the CO₂ content. The recommended CO₂ limit value for ambient air is 1000 ppm. An exceeding of this limit causes tiredness and a loss of concentration. The high quality and precise CO₂-transducer works according to the infrared principle (NDIR). An auto-calibration procedure compensates aging effects and is responsible for an excellent long term stability of this CO₂ transducer. Due to the freely adjustable output signal the transmitter could be used for nearly each existing controller input etc. Additionally, there is a local display which shows beside the actual CO₂ concentration, the minimum and maximum values as well as an optical alarm.

Specifications:

Measuring range:	Standard: 0 ... 2000 ppm CO ₂ (carbon dioxide) Optional: 0 ... 5000 ppm CO ₂ (carbon dioxide)
Measuring principle:	infrared principle (NDIR)
Accuracy:	standard: ±50 ppm ±2 % of meas. value (at 20 °C, 1023 mbar) opt. /5000: ±50 ppm ±3 % of meas. value (at 20 °C, 1023 mbar)
Output signal:	4 ... 20 mA (3-wire), standard 0 ... 1 V or 0 ... 10 V (3-wire), upon upcharge
Output scaling:	free scaleable, by entering display range
Auxiliary energy:	12 ... 30 V DC, max. 600 mA (at option 0 ... 10 V: 18 ... 30 V DC, max. 600 mA)
Permissible burden (at 4 ... 20 mA):	$R_A < 200 \Omega$
Perm. load (at 0...Volt):	$R_L > 3000 \Omega$
Display:	approx. 10 mm hohe, 4-digit LC-display
Working condition:	-10 ... +50 °C, 5 ... 95 % RH, 850 ... 1100 hPa
Storage condition:	-25 ... +60 °C, 5 ... 95 % RH, 700 ... 1100 hPa
Electric connection:	elbow-type plug acc. to EN 175301-803/A (IP65), max. wire cross section: 1.5 mm ² , wire diameter from 4.5 ... 7 mm
Housing:	ABS, 82 x 80 x 55 mm (without elbow-type plug)
Mounting:	with fixing holes for wall mounting
Mounting distance:	70 x 50 mm (W x H)
Fixing screws:	max. shaft-Ø 4 mm
Weight:	approx. 225 g
Features:	min-/max-value memory, optical alarm, input of offset and scale for adjusting via keys possible

Option:

MB2: Measuring range: 0 ... 5000 ppm CO₂

AV01: Output signal 0 ... 1 V

AV010: Output signal 0 ... 10 V

Accessories and spare parts:

GSN 24-750

Art. no. 604387

Plug-in power supply (230 V AC => 24 V DC / 750 mA)