



### Features

- Digital design of the electronic unit
- Measuring ranges 0...160 mbar to 0...2500 mbar each intermediate value adjustable
- Accuracy 0.15 %
- Immersion case: stainless steel, coated
- Titanium diaphragm
- Cable connection pluggable
- Degree of protection IP 68
- Output signal: 4...20 mA

### Options

- Temperature measuring with Pt 100
- Explosion protection: II 1G Ex ia IIC T6 Ga
- Can be parameterized via PC (FSK-Bus)

### Application area

- Water / wastewater
- Sea water desalination plants
- Swimming baths

### Technical Data

#### Instrument ranges

nominal range	measuring spans		measuring ranges *		overload limits	vacuum tight < 50 °C
	min. span	max. span	min.	max.		
2500 mbar	160 mbar	2500 mbar	0...160 mbar	0...2500 mbar	6 bar	40 mbar abs

\* each intermediate value adjustable, see order code → configuration

#### Housing design

housing material:	stainless steel, mat.-no. 1.4404 (316L), coated
diaphragm material:	titanium
degree of protection:	IP 68, immersible
electrical connection:	stainless steel connector, degree of protection IP 68
cable connection:	pluggable, slit cable 5 strand, see accessories, observe mounting instructions

#### Weights

probe:	approx. 0.7 kg
+ supply lines depending on length/m:	approx 0.1 kg

#### Measuring system

sensor:	piezoresistive measuring bridge, protected by an internal high-grade steel diaphragm
system filling:	silicon free, synthetic oil

#### Temperature ranges

ambient temperature:	-20...+85 °C
storage temperature:	-40...+85 °C

Note safety values as per examination certificate!

#### Supply

function range:	12...30 V DC
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#### Output

Pressure	
signal:	4...20 mA, 2-wire circuitry
current range:	3.8...20.8 mA
current limitation:	22 mA

### Applications

The submersible pressure transmitter is suitable for level measurement in wells, tank farms and open stretches of water. It converts the hydrostatic pressure measurements into a load-independent current or voltage signal.

#### Output (contin.)

alarm state:	< 3.6 mA standard, option: > 21 mA
response time:	160 ms
damping:	0...120 seconds, standard: 0.0 sec
burden:	$R \leq \frac{U_B - 12 V}{20 \text{ mA}}$ (kOhm)

$R \geq 250 \Omega$  bei communication with LEVELcom

#### Temperature

output signal:	Pt 100, 2-wire circuitry
application range:	-20...+85 °C
response time $T_{90}$ :	approx. 10 min.

#### Accuracy

##### general

limit point setting:	per DIN 16086
reference conditions:	per DIN EN 60770-1
calibration position:	vertical mounting position

##### pressure

meas. range 0... mbar	2500...1000	600...250	160
lin./hys./rep. (% v.E.)	0.15	0.3	0.4
temperature 0...50 °C	0.2	0.4	0.6
influence(%) -20...85 °C	0.4	0.8	1.2

long term drift  
DIN EN 60770-1:

0.1 % f.s.

##### temperature

meas. element:	Pt 100 class B, DIN EN 60751
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#### Approval/Tests

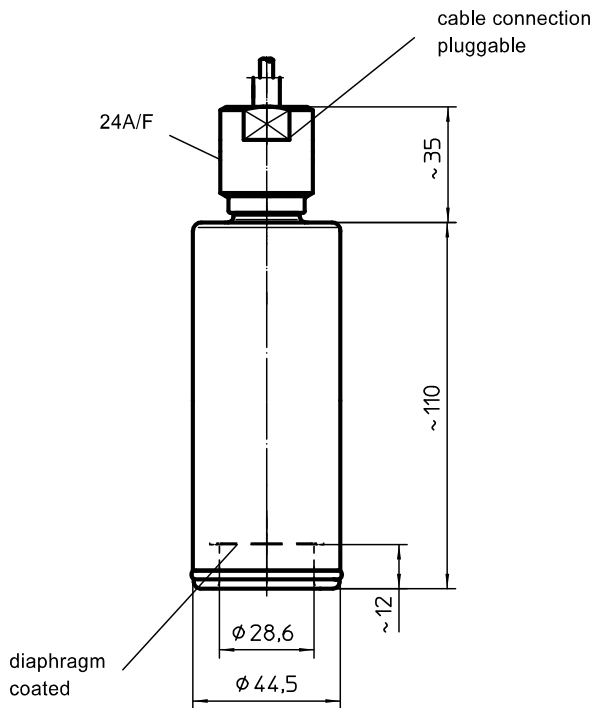
EMC-tested IACS E10  
EC-Type Examination Certificate: TÜV 96 ATEX 1122 X  
explosion protection: II 1G Ex ia IIC T6 Ga  
pressure signal      temperature signal

$U_i \leq 30 V$	$U_i \leq 20 V$
$I_i \leq 150 \text{ mA}$	$I_i \leq 320 \text{ mA}$
$P_i \leq 0.7 W$	$P_i \leq 0.1 W$
$C_i \leq 20 \text{ nF}$	$C_i \leq 6 \text{ nF}$
$L_i \leq 50 \mu H$	$L_i \leq 50 \mu H$

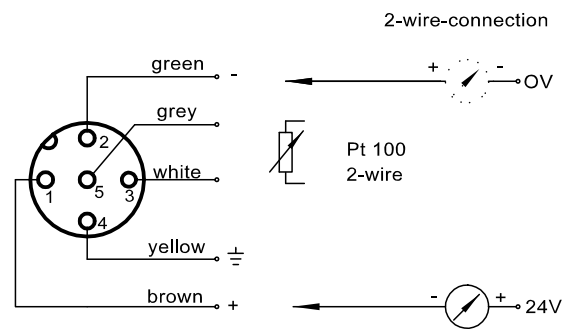
**Parameterizing with LEVELcom**

Parameter	Setting range	Standard
lower range value	see instrument ranges	nominal range
upper range value	see instrument ranges	nominal range
unit	mbar, mmWVs	mbar
damping	0.0 - 120.0 sec.	0.0 sec.
alarm behavior	<3.6 mA, >21.0 mA	<3.6 mA
tank name		-
order number		-
pressure trimming	zero point -50...+50 % of nominal range span -10...+10 % of nominal range	-
current adjustment	-2 % ... + 5 %	-
measuring circuit test	3.55 ... 21.5 mA	-
maximum pointer	pressure and temperature resettable	-

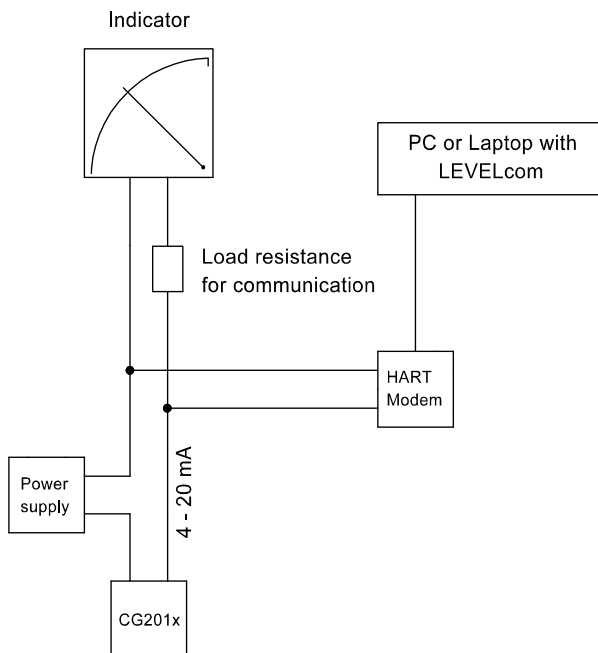
**Dimensions**



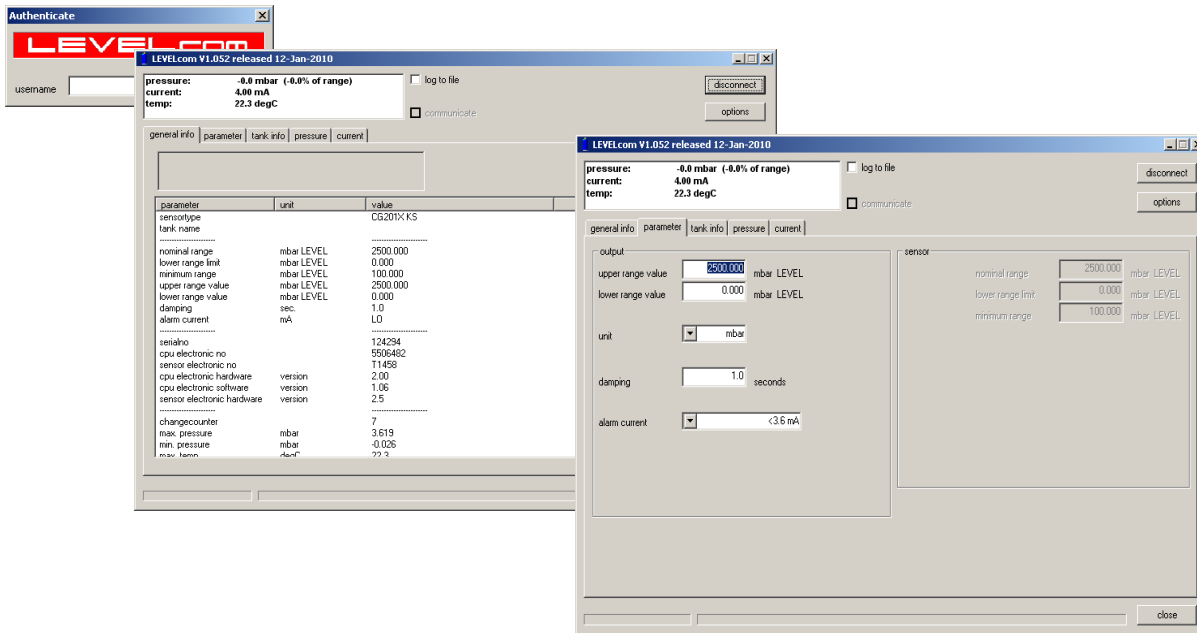
**Connection diagram**



**Function diagram**



Dialogue von LEVELcom



**Order Details** - Please give additional specifications for models not listed -

Submersible pressure transmitter for hydrostatic level measurement		CG201 .																	
Ex-protection	· without																		
	· Ex-protection, type of protection see below																		
output signal	· pressure measurement 4...20 mA																		
	· temperature measurement Pt 100																		
	· without temperature measurement																		
case design	· stainless steel mat.-no. 1.4404 (316L), coated																		
nominal range	· 2500 mbar																		
configuration	· per customer choice																		
	measuring range	initial value:																	
	range	full scale:																	
	unit: (mbar, mmWS)																		
	alarm state: < 3.6 mA (standard), > 21 mA, option																		
	damping: 0...120 sec. (standard: 0 sec.)																		
diaphragm material	· titanium																		
<b>additional features (to be indicated in case of need, only)</b>																			
type of ex-protection	·  II 1G Ex ia IIC T 6 Ga																		
order code (example):		CG2010	M04	P1	M1	A1015	F2	K53	S68										

accessories <sup>1</sup>

Communication	· LEVELcom software on CD-Rom	MC1030	
	· HART-modem with USB interface	MC1040	
	· HART-modem with USB interface, Ex	MC1041	
<b>cable connection pluggable, threaded adapter (cylindrical) <sup>2</sup></b>		UG2011	
design	with polyamide flexible tube	· cable length 2.5 m	G2402
		· cable length 5 m	G2405
		· cable length 10 m	G2410
		· cable length 15 m	G2415
		· cable length 20 m	G2420
		· cable length 25 m	G2425
		· cable length 30 m	G2430
		· cable length 35 m	G2435
	· cable length pls. specify (max. 35 m)	G2499	
<b>cable attachment galvanized</b>		MM3010	

<sup>1</sup> other accessories for adapting the submersible pressure transmitter are available as modular systems

<sup>2</sup> further technical details see data sheet D6-036 (upon request)