

FEATURES

- **Input:**
Current 0(4)...20 mA or
Voltage 0(2)...10 V
- **Output:**
2 relays with change over contacts
- **Parameterization, handling and actual value indication by display**
- **Door installation and GDC version with integrated transmitter feeding**
- **Galvanic 3-way isolation of 4 kV**



FUNCTION

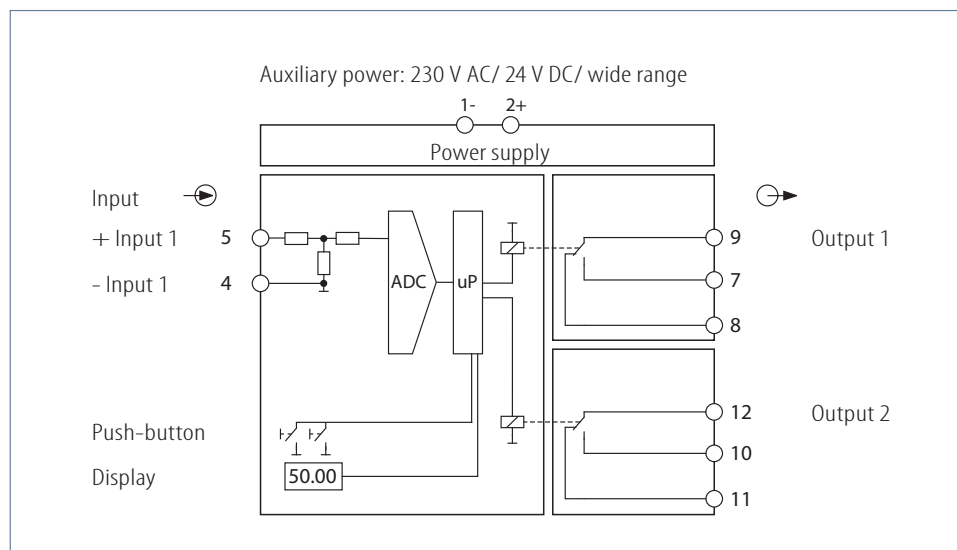
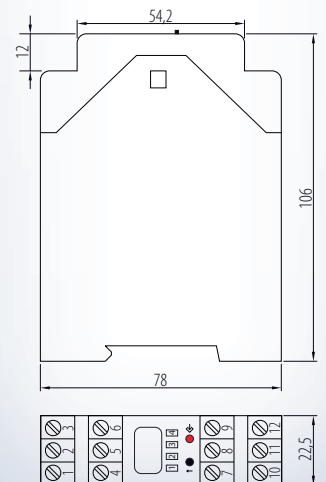
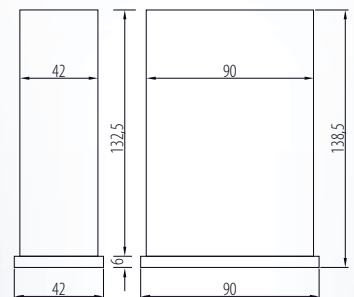
The DGW 1.00 is used for the limit value control of standard inputs. The parameterization is carried out by front side push-buttons and indicated by display.

The 4-digit actual value indication is free scalable.

Up to 4 limiting values can be defined. The on-delay and the delay release times of the relays are adjustable separately. The status indication of the relays is displayed as bargraph.

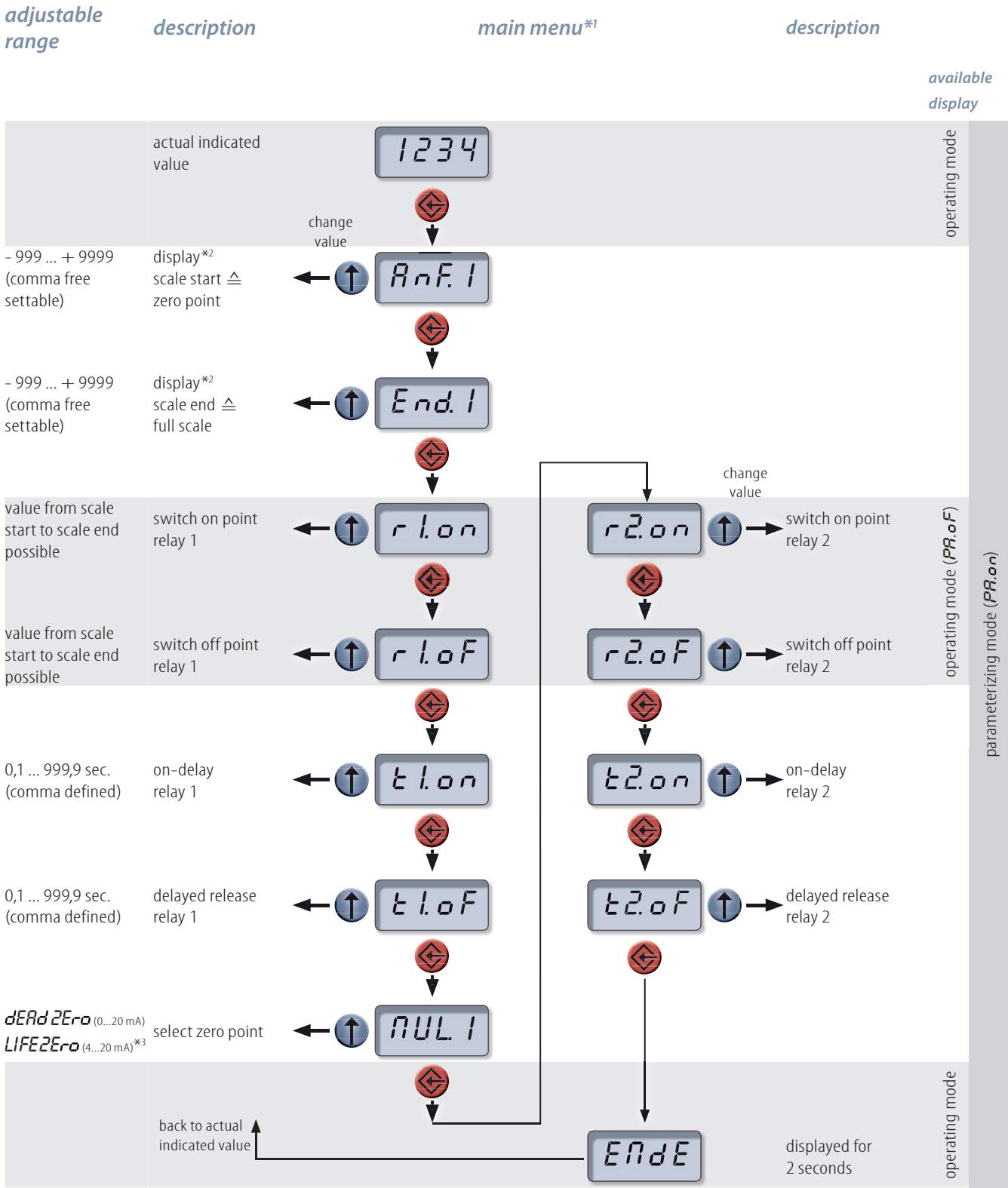
The DGW 1.00 GDC and DGW 1.00 T are supplied with a integrated 2-wire transmitter feeding.

At current input 4...20 mA or the **optional** voltage input of 2...10 V the Live-Zero monitoring is active. At the same time the particular relay out of the valid range of 3,9...20,8 mA (1,9...10,4 V) fallen off.





OVERVIEW-MENU



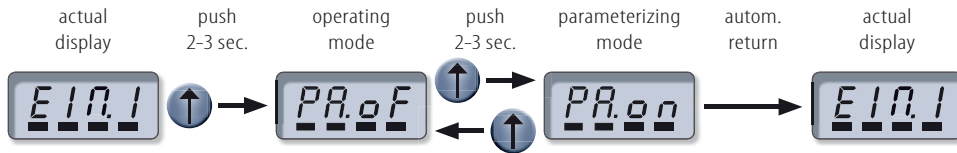
Legend: selection next

*¹ There is a constant change between the actual indicated value and the display of the menu item.

*² The display is free scalable, e.g. instead of the 4...20 mA 0...100 m³ is being displayed.

*³ Live-Zero is monitoring the range: relay out of range of 3,9...20,8 mA fallen off.

changeover parameterizing mode/ operating mode:

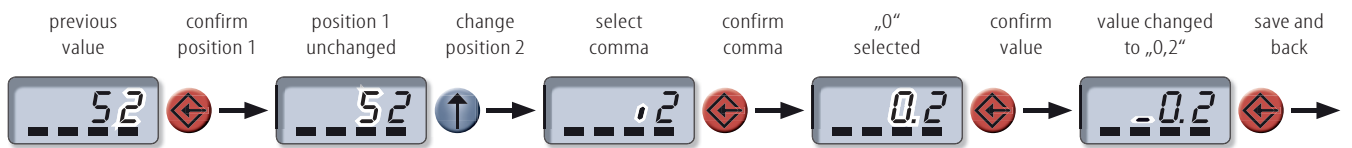


CHANGE VALUE (select to change the menu item):

change value:



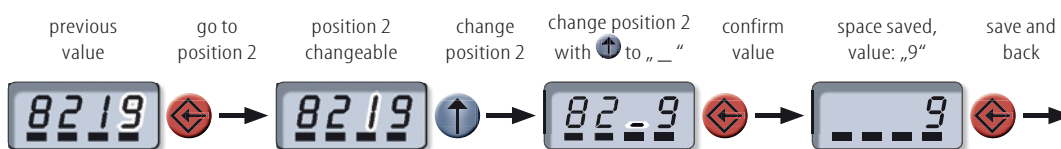
define decimal place:



delete decimal place:



delete positions:



Details of operation:

The displayed position gets changed with the push-button . Values such as to , minus , comma , and space are possible.

Use the push-button to confirm the actual position and go to the next or return to the main menu after changing the last digit. Break-off possible by pushing longer.

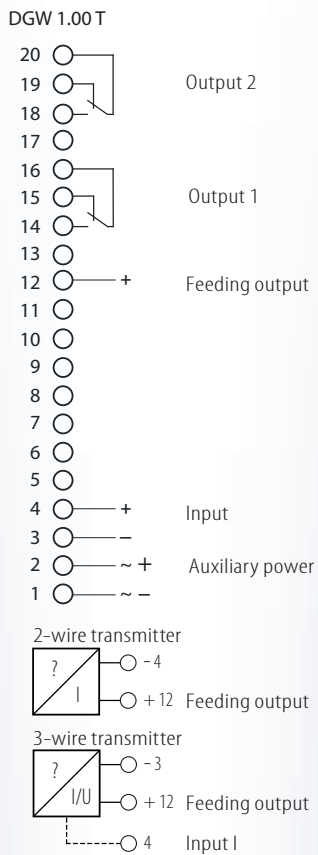
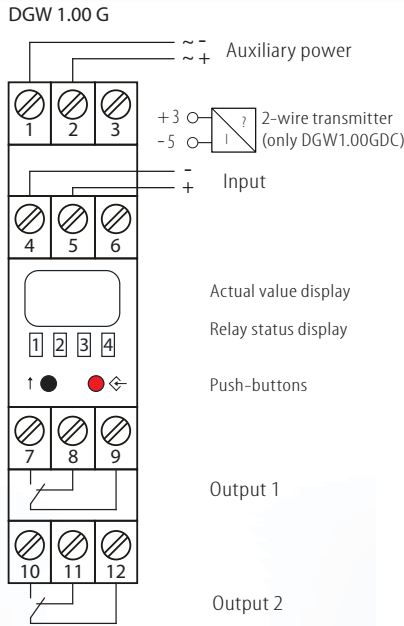
Optional door installation:

Push red push-button longer than 2 seconds: code requested. Enter default code to change parameters, otherwise display only.

Legend:

- Digit on display blinks.
- Display of comma.
- space
- selection
- confirm

DGW 1.00 G DGW 1.00 T



Input:

I: load-independent DC current: 0(4)...20 mA input resistance approx. 50 Ω
connection: terminal 4 -, 5 +

optional/ alternatively:

U: load-independent DC voltage: 0(2)...10 V input resistance approx. 100 kΩ

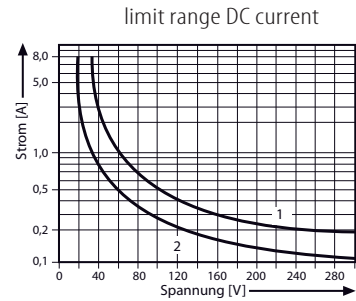
Additional at DGW 1.00 GDC and DGW 1.00 T:

transmitter feeding: approx. 20 V at 20 mA

Output:

2 relay outputs : changer
max. switching current: 8 A
max. switching voltage: 250 V AC
mechanical life cycle: 30 x 10⁶ cycles
contact life cycle: 10⁵ cycles
connection: see connection diagram

1 - resistive load
2 - inductive load



Adjustment:

The functions are adjusted by 2 front side push-buttons and display. See page 03-2 and 03-3.

Display:

4-digit LC-display with 2 bargraphs to indicate the relay status of output 1 and 2.



Relay 1 Relay 2

Environmental conditions:

Storage temperature: -40...+70 °C
Operating temperature: 0...55 °C
Isolation voltage: 4 kV eff. 1 sec.
input-output-auxiliary voltage

Auxiliary power:

Housing for top hat rail:
230 V AC: 230 V AC approx. 10 mA
24 V UC: 20...45 V AC 10...70 V DC approx. 50 mA

Door installation:

24 V UC: 20...30 V AC/ DC approx. 50 mA
Wide range: 20...253 V AC/ DC approx. 10 mA

Characteristics of transmission:

Linearity error: < 0,03 % of final value
Temperature error: < 30 ppm/ K

Directive:

EMV Directive: 2004/108/EG*
Low Voltage Directive: 2006/95/EG

*minimum deviations possible during HF-radiation influence

Mounting details:

Housing for top hat rail

Type of protection: IP 40 housing
IP 10 clamps
Mounting rail fixed according to EN 50022-35 x 6,2 mm
Width: 22,5 mm
Weight: 250 g
Material: Polyamide PA
Flammability class: V0 (UL94)
Approval: CE
Connection: screw clamps ≤ 2 x 2,5 mm²

Door installation:

Type of protection: IP 54 Front
Front frame: 96 x 48 mm
Installation depth: 138,5 mm
Weight: 290 g
Material: PC/ ABS
Flammability class: V0 (UL94)
Approval: CE
Connection: pluggable screw clamps 0,14...1,5 mm²

For safety reasons we recommend to mount the housing for top hat rail with a distance of approx. 5 mm to each other.

Schuhmann GmbH & Co. KG
Kleingartacher Str. 21
D-74363 Güglingen
Tel. +49 71 35 50 56
Fax +49 71 35 53 55
www.schuhmann-messtechnik.de

Ordering information:

Voltage input **optional!**
Please specify special signals in clear text:
0(2)...10 V

Type: DGW 1.00 G 230 V AC housing
DGW 1.00 GDC 24 V UC housing
DGW 1.00 TUC 24 V UC door inst.
DGW 1.00 TW wide range door inst.