

# 2-channel digital threshold switch

DGW 2.00 G  
DGW 2.00 T

## FEATURES

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



## FUNCTION

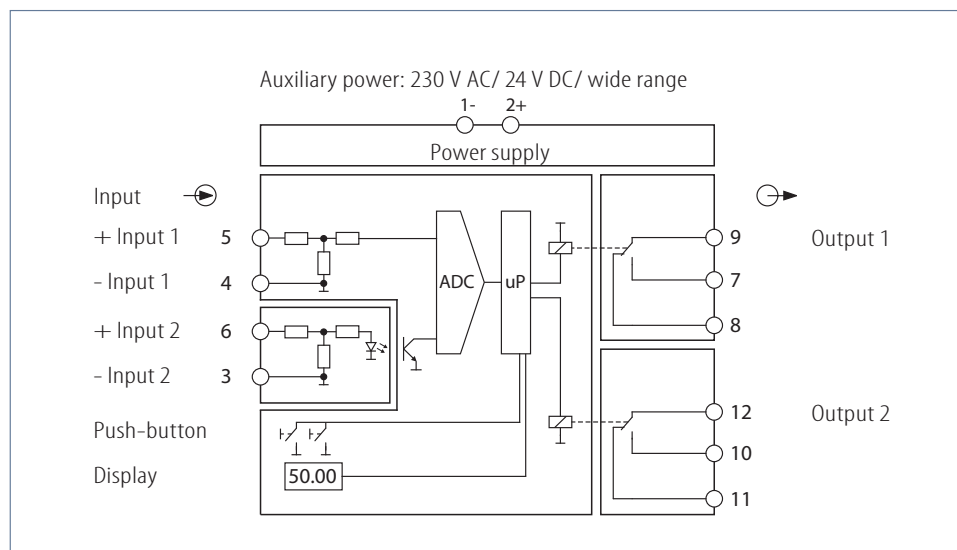
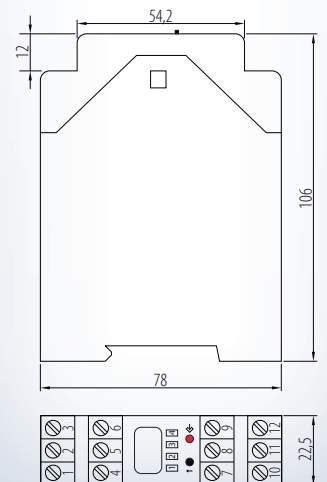
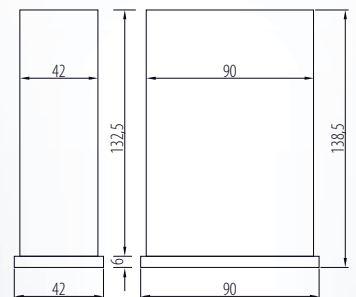
The DGW 2.00 is used for the limit value control of standard inputs. The parameterization is carried out by front side push-buttons and indicated by display.

The 4-digit actual value indication is free scalable.

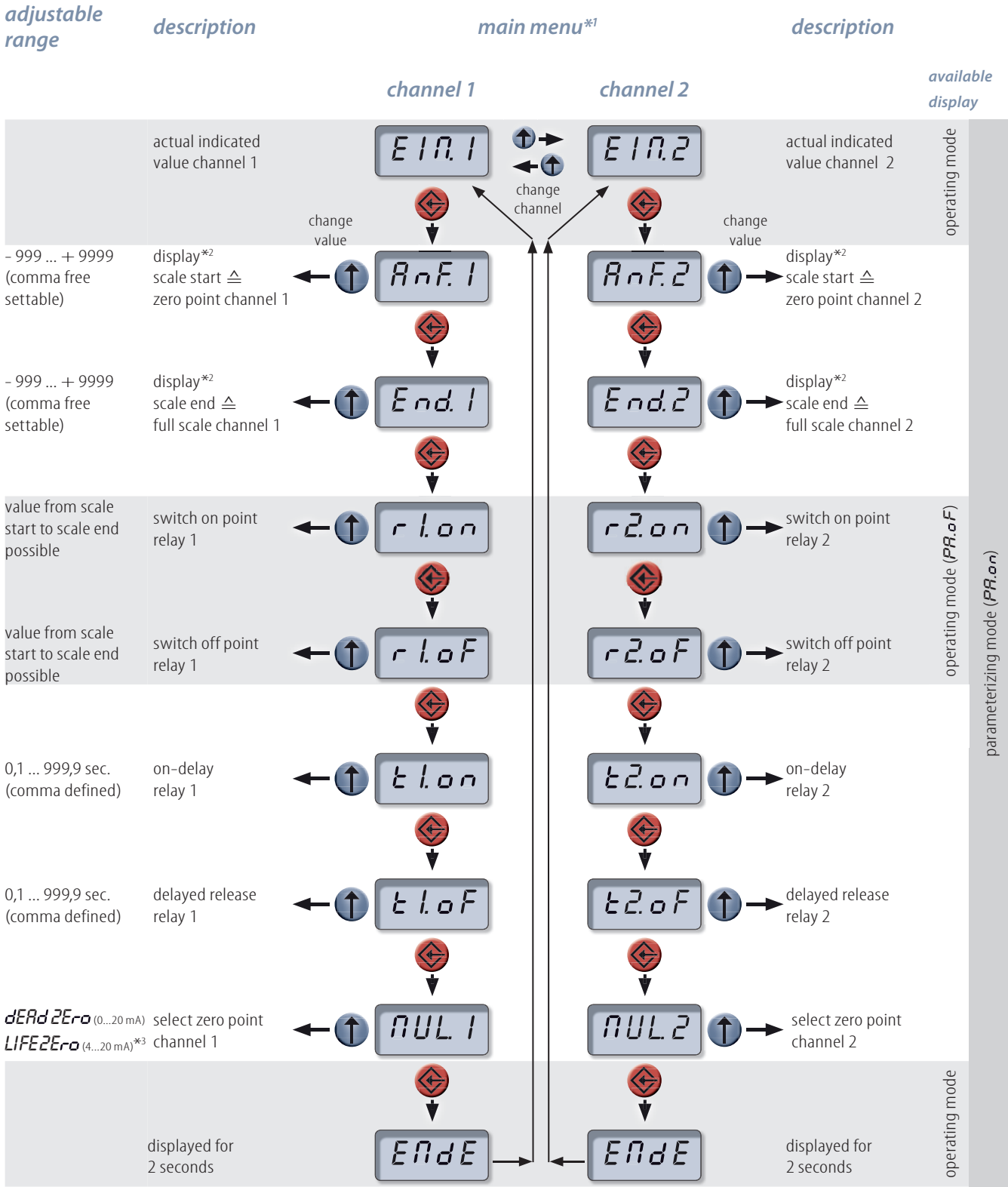
Up to 4 limiting values can be defined. The on- and off-delay times of the relay are adjustable separately. The status indication of the relays is displayed as bargraphs.

The DGW 2.00 T is equipped 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



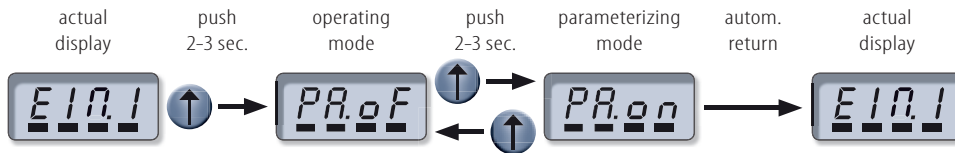
Legend: selection next

\*<sup>1</sup> There is a constant change between the actual indicated value and the display of the menu item.

\*<sup>2</sup> The display is free scalable, e.g. instead of the 4...20 mA 0...100 m<sup>3</sup> is being displayed.

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

### changeover parameterizing mode/ operating mode:

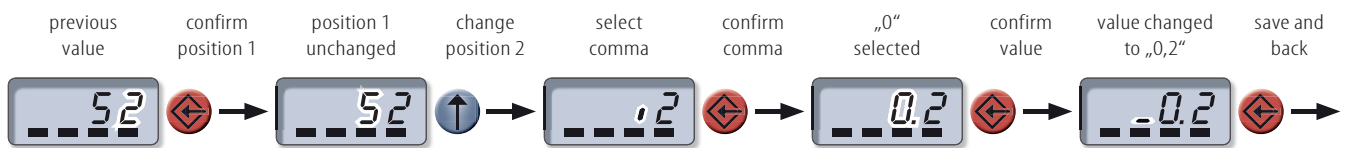


### CHANGE VALUE (select to change the menu item):

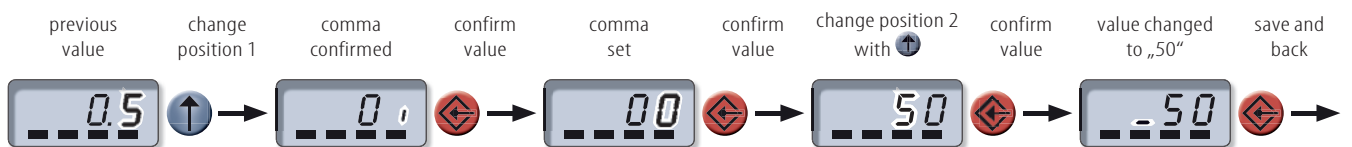
#### change value:



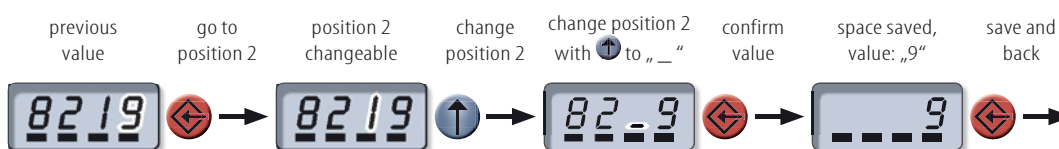
#### define decimal place:



#### 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.

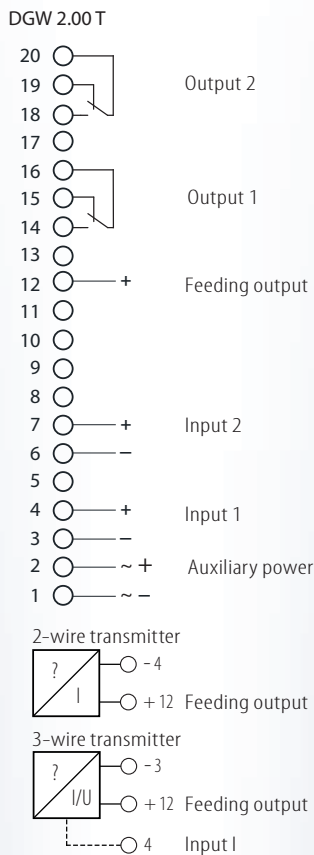
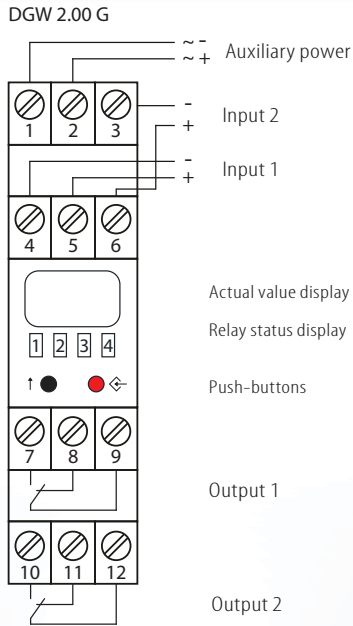
Optional door installation:

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 2.00 G DGW 2.00 T



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## Input:

I: load-independent DC current: 0(4)...20 mA input resistance approx. 50 Ω  
connection input 1: terminal 4 -, 5 +  
connection input 2: terminal 3 -, 6 +

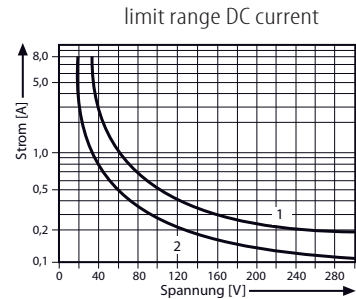
## optional/ alternatively:

U: load-independent DC voltage: 0(2)...10 V input resistance approx. 100 kΩ  
Additional at DGW 2.00 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 10<sup>6</sup> cycles  
contact life cycle: 10<sup>5</sup> 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 03-6 and 03-7.

## 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 mm<sup>2</sup>

### 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 mm<sup>2</sup>

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

## Ordering information:

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

**Type:** DGW 2.00 G 230 V AC housing  
DGW 2.00 GDC 24 V UC housing  
DGW 2.00 TUC 24 V UC door inst.  
DGW 2.00 TW wide range door inst.

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