

## **FEATURES**

- Input: Current 0(4)...20 mA or Voltage 0(2)...10 V
- Output:2 relays (changer)
- Adjustment of limit value by front side push-button
- **■** Indication of
  - contact state by LED
  - actual value by bargraph
- Additional functions:
  Hysteresis, window, ON/ OFF-delay,
  inverse function
- Galvanic 3-way isolation of 4 kV



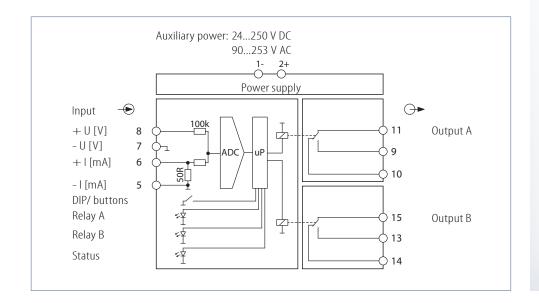
## **FUNCTION**

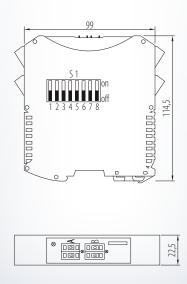
The Limit Switch GS 2.00 GW is used for the control of limit values of standardized current or voltage signals.

Due to the 2 relays at the output with one potential free change-over contact each two switching functions can be realized. The switching status of the erected relay will be indicated by LED display.

The switching point can be adjusted by the front side push-button the effective direction of the relay by the slide switch on the side.

The application range is e.g. threshold switch, supervisory relay, pump control of containers, control of final signals of positioning elements etc.

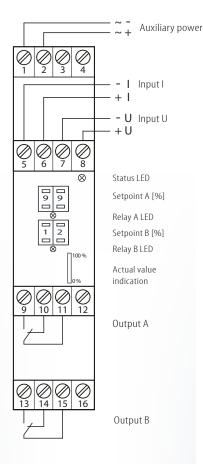






## **GS 2.00 GW**

## Connection diagram:



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| Input:                         |                    |                                       |  |  |
|--------------------------------|--------------------|---------------------------------------|--|--|
| I: load-independent DC current | 0(4)20 mA          | input resistance approx. $100~\Omega$ |  |  |
| connection:                    | terminal 5 - , 6 + |                                       |  |  |

U: load-independent DC voltage 0(2)...10 V input resistance approx.  $100 \text{ k}\Omega$ connection: terminal 7 -, 8 +

**Output:** 

2 relay outputs: changer max. switching current/voltage: 8 A/ 250 V AC

mech./ contact life cycle: 30 x 106 cycles/ 105 cycles see connection diagram connection:

Adjustment:

Select function with DIP switch on the side (S1-1 to S1-8):

| Setpoint | Switch       | Adjustment | Function   |
|----------|--------------|------------|--|
|          | front side A | 099 %      | limit value adjustment A   |
|          | front side B | 099 %      | limit value adjustment B   |
| Input    | S1 - 1       | OFF        | input current  |
|          | S1 - 1       | ON         | input voltage  |
|          | S1 - 2       | OFF        | input 020 mA/ 010 V  |
|          | S1 - 2       | ON         | input 420 mA/ 210 V  |
| Relay A  | S1 - 3       | OFF        | relay A is not inverted  |
|          | S1 - 3       | ON         | relay A is inverted  |
|          | S1 - 4       | OFF        | delay relay A ON/ OFF, 0,5 sec.  |
|          | S1 - 4       | ON         | delay relay A ON/ OFF, 5 sec.  |
| Relay B  | S1 - 5       | OFF        | relay B is not inverted  |
|          | S1 - 5       | ON         | relay B is inverted  |
|          | S1 - 6       | OFF        | delay relay B ON/ OFF, 0,5 sec.  |
|          | S1 - 6       | ON         | delay relay B ON/ OFF, 5 sec.  |
| General  | S1 - 7       | OFF        | switching hysteresis 0,5 %   |
|          | S1 - 7       | ON         | switching hysteresis 5 %   |
|          | S1 - 8       | OFF        | separate switching function for limit value                                    |
|          | S1 - 8       | ON         | common switching function A, B, switching between A [%] and B [%] (hysteresis) |

Display:

LED Status green, active input signal within range, ready for use

green, flashing limit exceeded LED Relay A red, active relay A tightened

LED Relay B relay B tightened red, active

Actual value indication front side bargraph up to 100 % green, from 100 % red

**Environmental conditions:** 

Storage temperature: -40...+70 °C EMC Directive: 2014/30/EU\* Operating temperature: 0...55 °C Low Voltage Directive: 2014/35/EU \*minimum deviations possible during

Directive:

HF-radiation influence

Mounting details:

Type of protection:

Flammability class:

Width:

Weight:

Material:

Approval:

Housing for top hat rail

Mounting rail fixed according to

Isolation voltage: 4 kV eff. 1 sec. input-output

4 kV eff. 1 sec. auxiliary voltage

**Auxiliary power:** 

24...250 V DC Wide range:

90...253 V AC

< 3 W

Influence of

auxiliary power: < 0,1 %

Characteristics of transmission:

Resolution: 10 bit

Linearity error: < 0,1 % of final value

Temperature error: < 30 ppm/K

Connection: screw clamps 0,2...2,5 mm<sup>2</sup>

For safety reasons we recommend to

IP 20 housing

EN 50022-35 x 6,2 mm

160 g

22,5 mm

V0 (UL94)

Polyamide PA

IP 10 screw clamps

mount the housing for top hat rail with a distance of approx. 5 mm to each other.

**GS 2.00 GW** Ordering information: Type: wide range

03-26

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