

µP-display with freely adjustable scale and without auxiliary energy for all 4 ... 20 mA 2-wire measuring transducers

GIA 0420



CE In accordance with EN61326 +A1 +A2 for unrestricted use in residential and industrial area

GIA 0420

Display

GIA 0420 SP

Display with additional (electrically isolated switching output open collector) - can be configured as MIN-/MAX alarm.

GIA 0420 Ex

EX-protection: II 2 G EEx ib IIC T4 (ZELM 03 ATEX 0135)

- time-saving on-site scaling without any additional auxiliary modules
- simple device identification by means of insertion film.
- optimum operational reliability due to integrated self-diagnosis function and watchdog system.
- large display range from -1999 to +9999 digits
- high accuracy combined with minimum temperature drift due to integrated self-calibration
- large LCD display, approx. 10 mm high
- smallest housing dimensions possible
- very low voltage load at approx. 3 V
- monitoring of probe damage, probe short-circuit, values no longer within measuring range.
- software filter for clear display even in case of encoder signal interference (can be switched on and off)
- simple installation by means of pole-free connection (plus and minus exchangeable)
- additional monitoring function (GIA 0420 SP)

Specification:

- Input signal:** 4 ... 20 mA
- Reverse voltage protection:** pole-free connection
- Voltage load:** approx. 3 Volt
- Accuracy:** $\pm 0.2\%$ FS ± 1 digit (at nominal temperature = 25°C)
- Temperature drift:** 100 ppm
- Meas. rate:** approx. 3 measurements / sec.
- Filter:** 3 stages, can be switched on and off
- Display:** LCD display, approx. 10 mm high
- Display range:** -1999 to 9999
- Decimal point:** any position selectable
- Scaling:** scale freely adjustable via 3 keys at the back side of the unit
- Limit:** LI 0 Values above/below range permissible
LI 1 Values above/below range not permissible
- Working temperature:** 0 to 50°C
- Storage temperature:** -20 to 70°C
- Electric connection:** 2-pin screw-type/plug-in terminal max. terminal range up to 1.5 mm²
(for GIA0420SP): 2 x 2-pin screw-type/plug-in terminal max. terminal range up to 1.5 mm²
- Housing:** fibre-reinforced Noryl
- Front screen:** polycarbonate
- Dimensions:** 24 x 48 mm (front dimensions)
- Panel cutout:** 21.7^{+0.5} x 45^{+0.5} mm (H x W)
- Mounting depth:** approx. 65 mm incl. terminal
- Protection rating:** IP54 (IP65 by means of additional optional silicone O-rings, **GGD2448SET**)
- Switching output:** (only for GIA 0420 SP) electrically isolated open collector switching output
- Switching capacity:** 24 V DC 3 mA

Connection data for GIA0420... Ex:

For connection to certified intrinsically safe current circuits with the following maximum values:

Ui = 28 V, Ii = 100 mA, Pi = 800 mW

Effective internal capacity: Ci \leq 30 nF

Effective internal inductivity: is so small that it can be neglected

Self-supplying plug-in display for 4-20mA measuring transducer
no auxiliary energy source required - device will tap from loop current.

GIA 0420 VO



GIA 0420 VO

GIA 0420 VO Ex

EX-protection: $\text{II 2 G EEx ib IIC T4 (ZELM 03 ATEX 0135)}$

Specification:

| | |
|-----------------------------|--|
| Input signal: | 4-20mA |
| Polarity: | no polarity needs to be observed for installation |
| Voltage load: | approx. 3V |
| Accuracy: | $\pm 0.2\% \text{ FS} \pm 1 \text{ digit}$ (at nominal temperature = 25°C) |
| Display: | 10mm high LCD |
| Display range: | -1999 up to +9999 |
| Decimal point: | any position |
| Scale: | freely adjustable via 3 buttons (accessible after cover has been removed) |
| Measuring rate: | approx. 3 measurements / sec. |
| Filter: | can be switched on in 3 stages |
| Limit: | LI 0: Values above/below range permissible LI 1: Values above/below range not permissible |
| Electric connection: | special-adaptor design for cubic plug DIN 43650 for simple plug-in wherever required. 2 screws (68 and 75 mm) included in scope of supply. |
| Housing: | 48.5 x 48.5 x 35.5 (H x W x D) maximum dimensions by means of special adaptor: 50.5 x 90 x 39.5 (H x W x D), housing made of ABS (impact resistant plastic), transparent panel made of polycarbonate, (splash water-proof IP65) |
| Working temperature: | 0 to 50°C |
| Temperature drift: | 100 ppm |

Connection data for GIA0420... Ex:

For connection to certified intrinsically safe current circuits with the following maximum values:

Ui = 28 V, Ii = 100 mA, Pi = 800 mW

Effective internal capacity: $Ci \leq 30 \text{ nF}$

Effective internal inductivity: is so small that it can be neglected

- no polarity
- no auxiliary energy source required - device will tap from 4 to 20 mA loop current.
- scale freely adjustable 'on site' within seconds, no auxiliary devices required
- can be turned to any position, fits in any position regardless of transmitter location
- large display range from -1999 to 9999 Digit.
- maximum accuracy and minimum temperature drift
- large, 10 mm high LCD
- plug-in wherever required and device will be ready!
The quickest way possible to get an "on site display" for your 4 to 20mA measuring transducers.
- monitoring for probe damage, probe short circuit, values above/below permissible limit
- steady display even if transmitter signal is disturbed: due to software filters (can be switched on/off)
- voltage load approx. 3 Volt only
- meets even strictest CE requirements. (EN 61326 + A1 +A2)

GIA 0420 WK

GIA 0420 WK Ex

EX-protection: $\text{II 2 G EEx ib IIC T4 (ZELM 03 ATEX 0135)}$

Specification:

as GIA 0420 VO however

Electric connection: connection to any standard signal source (4-20mA) via 2m connection cable. Housing with mounting holes can be mounted to any surface whatsoever.



LED / LCD - Display type GIA 0420

Dimension drawing

