

Galvanic signals isolator GO

isolated (2,5 kV / 1 min)

compact dimensions

one or two channel version

INPUT SIGNALS	
CURRENT	4 – 20 mA DC
passive	(0,1 mA – 21 mA)

OUTPUT SIGNALS	
CURRENT	4 – 20 mA DC
passive	(0,1 mA – 21 mA)

TECHNICAL DATA	
POWER SUPPLY	input: passive, powered by active input current loop 4-20mA , max.voltage drop in look is 3.9 VDC
	output: passive, powered by aktive signal 4-20 mA , power supply voltage range : min 6 – max 32 VDC
Input voltage drop	max 3.9 VDC : $\rightarrow 2.5 V + (I \times 70)$
CONVERSION	Linear
ACCURACY	+/- 0,2 % from full range
TEMP.COEFFIC.	0,01 % from full range / °C , Tref = 23 °C
ISOLATION STRENGTH	testing voltage : 2500 V DC / 1 min <i>input vs.output ,between channels</i>
INPUT protection	continous voltage overload +/-32 VDC (PTC)
Output protection	reversing polarity upto max. 32 VDC
MOUNTING	Plastic DIN rail box – 17,5 mm module
DIMMENSIONS	17.5 x 90 x 60 mm (W x H x D)
ENCLOSURE	IP20
WIRING CONNECTION	terminal strip <i>max. conductor cross-section is 2,5mm</i>
WEIGHT	GO-1: 39 g , GO-2 : 53 g
STABILISATION	5 minutes
OPERATING TEMPERATURE	- 10 °C / +50 °C
OPERATION	continuos
SITE ALTITUDE	max. 2000 metres above the sea level
EMC	ČSN EN 61326-1 , 61000-4-2,5,6
	ČSN EN 55011

Analogue galvanic signals isolators **GO** series for signals mentioned above are used as input interface for control systems, monitoring systems, data collection, controllers and everywhere else, where is galvanic isolation needed.

FUNCTIONS

- GALVANIC SIGNAL ISOLATION**
- SIGNAL CONVERSION just from 100µA**
- LINEAR SIGNAL CONVERSION**
- COMPACT SIZE 17,5 x 90 x 60 mm – DIN rail mounting**

DESCRIPTION

- Galvanic signal isolator GO is passive element that works in current loops 4 – 20 mA, with ability to convert signal just from 100µA.

GO galvanic signal isolator is based on:

- **Two level** isolation – galvanic isolation of input signal against output signal
- Two fully independent galvanically isolated channels
- Transferring analogue signal over **linear optocoupler**
- Input is protected against continous voltage overload +/-32 VDC
- Input is protected against reversing polarity upto max. 32 VDC

INPUT is passive

- It is necessary to connect active 4-20 mA signal
- Galvanic signal isolator input (one channel) causes voltage drop $2,5V + (I \times 70)$, max. 3,9 VDC in current loop, which is equal to insertion of max. impedance 195 Ω.

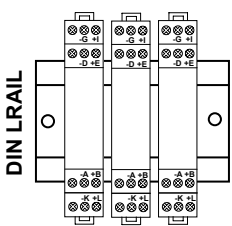
OUTPUT is passive

- It is necessary to connect 6 – 32 VDC power supply in to output loop
- With standart voltage 24 VDC: max.loop resistance 900 Ω

Galvanic signal isolator is built-in to a plastic box for DIN rail mounting in module width 17,5mm.

ORDER CODE	
GO - x	1 one channel
	2 two channels

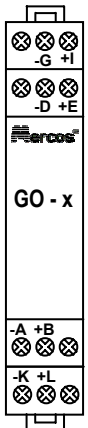
MOUNTING EXAMPLE



RECOMMENDATION:

- We recommend to mount converter on DIN rail vertically with inputs down.
- In case that operational temperature is expected to be higher than 40°C, we recommend to mount converters on DIN rail with 5mm space.

GO-1, GO-2 TERMINAL STRIP



LEGEND

1. channel

- strips. A, B analogue input : 1. channel
- strips. D, E analogue output : 1. channel

2. channel

- strips. K, L analogue input : 2. channel
- strips. G, I analogue output : 2. channel

GO - x

-A +B
-D +E
-K +L

SIGNAL WIRINGS for GO - 1/2

