

Series Z60

1 ... 3 Axes Position Indicator (24 VDC)



- Position indicator with signal inputs for 1 up to 3 axes
- Inputs for conventional encoders as well as for ELGO measuring systems (incremental or absolute)
- Adjustable reference value, tool-offset and saw blade thickness
- Digital control input (configurable) for each axis
- Modes for pulses, speed and concentricity
- 2 Open Drain and 2 Relay outputs
- Optional analog output available
- With serial RS232 interface
- Graphical LCD display
- Power down memory

Z60 - 1 ... 3 Axis Position Indicator (24 VDC)

General:

The series **Z60** is a 3 axes position indicator with a graphical LCD display. The **Z60** is based upon the approved types Z59 and Z89. These forerunners can be replaced by the **Z60**, apart from a few special versions.

The device **Z60** was developed to create an universal indicator, for connection of all *ELGO* measuring systems, as well as with incremental and also absolute signal output (see examples below). Further conventional encoders and measuring systems can be used, whose signal outputs correspond to the signal input formats given in the type designation of the Z60.

The function and parameter menu is similar as in the Z59 and Z89, clearly structured and easy to use. There are several new features and parameters updated. Additional information at the front side indicate the status of the relay, or other states, such as OFF / ON state of the front keys.

Optionally an analog input can be integrated, which enables the entry of analog measuring systems e.g. linear potentiometer or Tachometer. Also a discharge flow-through can be realized. Optionally two analog outputs (1x current output, 1x pressure output), two closing relay as well as two FET outputs are available).

Features:

- Graphic display (120 x 80 pixels)
- 3 digital inputs
- 2 outputs open-drain
- 2 relay outputs
- 1 serial RS232 interface
- 1 analog output 0... 10 VDC (option)
- 1 analog output 4... 20 mA (option)
- Easy mounting
- Tool offset
- Incremental / absolute measurement switchover
- Power down memory
- Adjustable reference value
- Adjustable pulse and edge evaluation (triggering)
- Operating mode up/down

ELGO measuring systems compatible to Z60:

Many incremental measuring systems from ELGO are compatible to Z16. As absolute encoder only EMAX can be used. Find a small extract from our product range below. More information on www.elgo.de



Technical specifications:

| Power supply voltage | 24 VDC +/- 20 % | | | |
|--|--|--|--|--|
| Consumption | max. 120 mA (without measuring-system) | | | |
| Encoder supply | 5 VDC or 24 VDC | | | |
| Max. consumption from measuring system | 300 mA | | | |
| Display | LCD 120 x 180 Pixel | | | |
| System accuracy | +/- 1 Digit | | | |
| Operation temperature | 0° +50° C | | | |
| Storage temperature | -40 +70° C | | | |
| Humidity | max. 80 % (not condensing) | | | |
| Protection Class | IP43 (front side) | | | |
| Relay outputs | potential free shutter relays 24 VDC / max. 1A | | | |
| Inputs | max. Input 10 mA, PNP (active high), switching voltage 24 VDC | | | |
| Interfaces | 1 x RS232 | | | |
| Power down memory | FRAM | | | |
| Datenspeicherung | FRAM | | | |
| Housing | | | | |
| Panel Housing | Aluminium | | | |
| Dimensions | 96 x 72 mm | | | |
| Panel cut out | 93 x 67 mm | | | |
| Installation Depth | 33 mm (without connectors) | | | |

Type designation:

For order, please use the following code:



A SN-Number

- **000** = *EL*GO Standard
- **001** = First special version
- 002 = Second special version

B Power supply

024 = 24 VDC Power supply

C Signal input

- 1 = A, B, Z / 24 VDC encoder supply / 24 V level (PNP) / 100 KHz*
- 2 = A, A', B, B', Z, Z' / 24 V encoder supply / 5 V-TTL level (PNP) / 100 KHz*
- $\mathbf{3} = A, A', B, B', Z, Z' / 5 V$ encoder supply / 5 V-TTL level (PNP) / 100 KHz*
- 5 = ELGO-422 interface modulation for linear EMAX absolute encoders*
- $\boldsymbol{6} \ = \text{A, B, Z / 5 V encoder supply / 5 V-TTL level (PNP) / 100 \text{ KHz}^*}$

Important notes:

| 1. | . The selection of signal inputs are each <u>per axis</u> e.g. | <i>"</i> 111" | = all 3 | axes |
|----|--|---------------|---------|------|
| | A, B, Z / 24 VDC encoder supply / 24 V level (PNP) | / 100 | KHz | |

2. If axis 3 is used as incremental input (1, 2, 3 or 6), <u>no</u> RS232 interface is available!

Please note: only encoders with an identical encoder supply are combinable

- *) Higher input frequencies (500 kHz) on request
- **) An EMAX absolute encoder can only be connected for 1 axis

D Options

- C = Analog input 0... 10 V (in preparation)
- E = Analog input 0... 20 mA (in preparation)
- \mathbf{F} = Analog output 0... 10 V
- H = Analog output 4... 20 mA

Order example:

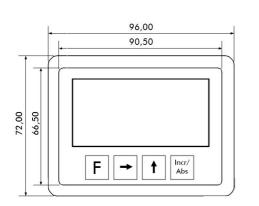
Z60 ELGO standard incl. 24 VDC power consumption, for all 3 axes A,B,Z / 24 V encoder supply / 24 V level (PNP) /100 KHz and inclusively analog output with $4\ldots$ 20 mA

Your order:

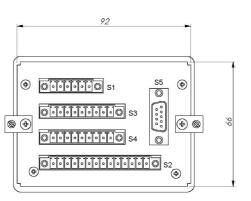
Z60 - $\overline{A}\overline{A}\overline{A}$ - $\overline{B}\overline{B}\overline{B}\overline{B}$ - $\overline{C}\overline{C}\overline{C}$ - $\overline{D}(\overline{D})$

Dimensions:

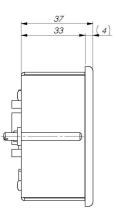
Front







Side



Accessories:

Power supply pack NG24.0:

115/230 VAC with external pack NG24.0

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