Series **Z58-600**

Universal Single Axis Position Indicator for incremental and absolute Measuring Systems

- Indicator for evaluation of incremental or absolute measuring systems
- Proven standard functions, e.g. multiplication factor, reference value, tool-offset, four-edge evaluation and inch/mm switching
- 6 digit LED display (14 mm high) with brightness control
- 3 external +24 V control inputs (reset, reference, tool-offset)
- Switching function via two normally open relay outputs
- Optional analog output 0 ... 10 V or 0 (4) ... 20 mA
- Power supply 24 VDC (optionally 115 or 230 VAC)
- Panel housing or optional built-on housing
- Serial RS232 interface
**Z58 - Universal Position Indicator for incremental and absolute Encoders**

**General:**

The universal ELGO position indicator Z58-600 is suitable for detecting lengths and positions. The device has 2 programmable pre-selections in order to control 2 internal normally open relays.

Both conventional incremental encoders and incremental or absolute ELGO measuring systems can be connected as input signals. It is therefore a universal device which can visualize the information of numerous ELGO standard measuring systems.

With the Z58-600, ELGO is able to offer a complete solution concerning signal detection and visualization.

The predecessor type Z54 can be replaced by Z58 (except for a few special devices). Please consider the pin assignment during Z54 replacement, because with Z58 additional plugs for new encoder types are available.

**Essential Features:**

- **Power supply:**
  - 24 VDC (standard)
  - 115/230 VAC with ext. ELGO power pack NG24.0 possible
  - 115 VAC with AC-version Z58-654-115-X possible*
  - 230 VAC with AC-version Z58-654-230-X possible*
- **Panel mounting housing (cut-out = 93 x 67 mm)**
- **Install depth = 73 mm (110 mm with D-SUB connectors)**
- Optional built-on housing available (option AG)
- Programmable preset-limits with 2 shutter relays
- RS232 interface (transmission of actual value)
- All connections are pluggable

*Limited range of functions and different rear panel

**Front with Keys and Status LEDs**

- **Status Relay 2** (option)
  - lights up when relay active
- **Directional sign** (lights up when counter value is negative)
- **Status Relay 1** (option)
  - lights up when relay active
- **Set to reference value**
- **Tool offset** (option)
  - Absolute / Relative measurement*
  - *) only in „Normal Mode”

**Terminal Assignment (rear)**

**Compatible Measuring Systems**

**Inkremental encoders:**

- ELGO EMIX, LMIX, DMIX, GMIX
- ELGO RMIX
- ELGO PMIX
- ELGO FMIX
- ELGO EMAX/FEMAX

**Absolute encoders:**
<table>
<thead>
<tr>
<th>Technical Data:</th>
<th>Type Designation:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mechanical Data</strong></td>
<td><strong>For orders please use the following code:</strong></td>
</tr>
<tr>
<td>Housing</td>
<td>Z58 - A AA - B B B - C - D D D D D</td>
</tr>
<tr>
<td>Housing material</td>
<td></td>
</tr>
<tr>
<td>Housing dimensions (W x H)</td>
<td></td>
</tr>
<tr>
<td>Panel cut out (W x H)</td>
<td></td>
</tr>
<tr>
<td>Panel cut out (W x H)</td>
<td></td>
</tr>
<tr>
<td>Keyboard</td>
<td></td>
</tr>
<tr>
<td>Installation depth</td>
<td></td>
</tr>
<tr>
<td><strong>Electrical Data</strong></td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td></td>
</tr>
<tr>
<td>Power supply voltage</td>
<td></td>
</tr>
<tr>
<td>Current consumption</td>
<td></td>
</tr>
<tr>
<td>Signal inputs</td>
<td></td>
</tr>
<tr>
<td>Incremental channels</td>
<td></td>
</tr>
<tr>
<td>Absolute channels</td>
<td></td>
</tr>
<tr>
<td>Input frequency</td>
<td></td>
</tr>
<tr>
<td>External inputs</td>
<td></td>
</tr>
<tr>
<td>Relay outputs</td>
<td></td>
</tr>
<tr>
<td>Analog outputs (option)</td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td></td>
</tr>
<tr>
<td>Connections</td>
<td></td>
</tr>
<tr>
<td>Data memory</td>
<td></td>
</tr>
<tr>
<td>Optional accessories</td>
<td></td>
</tr>
<tr>
<td>Environmental conditions</td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td></td>
</tr>
<tr>
<td>Protection class (front)</td>
<td></td>
</tr>
<tr>
<td>Protection class (rear)</td>
<td></td>
</tr>
</tbody>
</table>

**Type Designation:**

For orders please use the following code:

Z58 - A AA - B B B - C - D D D D D

**A** SN Number

- 600 = ELGO standard
- 601 = first special version
- 602 = second special version etc.

**B** Power Supply Voltage

- 024 = 24V DC (± 20 %)

**C** Measuring System (Channels - Supply - Levels - F<sub>max</sub>)

1 = A, B, Z - 24 V - HTL - 100 KHz
2 = A, A', B, B', Z, Z' - 24 V - TTL - 100 KHz
3 = A, A', B, B', Z, Z' - 5 V - TTL - 100 KHz
4 = compatible to absolute encoder FMAX
5 = compatible to absolute encoder EMAX
7 = A, B, Z - 5 V - TTL - 100KHz
8 = A, A', B, B', Z, Z' - 24 V - TTL - 500 KHz
9 = A, A', B, B', Z, Z' - 5 V - TTL - 500 KHz
10 = A, B, Z - 24 V - HTL - 500 KHz

**D** Options*  

- A = Built-on housing  
- D = 9-pin. (male) D-SUB for LMIX1/EMIX1  
- F = analog output 0…10 V  
- G = analog output 0…20 mA  
- H = analog output 4…20 mA  

* Multiple indications possible

**Example:**

Z58 - 6 0 0 - 0 2 4 - 1 - A A A - B B B - C - D D D D D

ELGO standard Z58 indicator with 24 VDC power supply voltage, HTL levels with max. 100 KHz input frequency and built-on housing.

**Your order:**

Z58 - A A A - B B B - C - D D D D D
Dimensions of Panel Housing (Standard):

Dimensions of Built-on Housing (Option AG):

Accessories for Z58:

<table>
<thead>
<tr>
<th>Order Designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NG24.0</td>
<td>External 24 VDC power pack (primary 115/230 VAC) for supply with AC voltage. With two mounting holes as well as a snap-on device for top hat rail mounting.</td>
</tr>
</tbody>
</table>