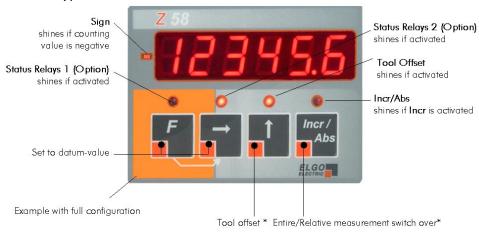
# **Z58 - Universal Position Indicator**

The position indicator Z58 is based on the proven Z54 - type. The predecessor-type "Z54" can be replaced with Z58 in most applications (except some special variants). Z58 was developed for processing incremental signals as well as signals from ELGO-Absolute Measuring Systems like FMAX/EMAX. Additionally conventional and commercial Encoders with SSI-output can be processed, when order SSI-Input (see Type designation).

Further an analog input is available for processing signals from analog encoders like linear-potentiometers or tachometers. Z58 standard is equipped with a serial RS-232 interface. Two shutter-relay outputs and an analog output are available as an option. The function and parameter menu is clearly structured and simply to handle. Additionally new functions and parameter were completed. Front located monitor-LED's signals the states of the relays or also different states of the front located keys, e.g. OFF/ON status.

- Processes incremental and optionally absolute signals
- RS-232 interface
- Power down memory
- Scaling factor and edge multiplier
- Digital brightness control
- 3 external inputs
- Inch/mm switch over
- 2 shutter-relay outputs (option)
- Analog output (option)
- (0... 10 VDC or 0 (4)... 20 mA)
- Analog input (option) for flow meter function (0... 10V or 0... 20 mA)

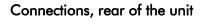
# Front, Keypad and Status-LEDs



## Option "Built on housing"



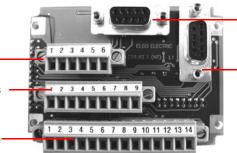
\* Only in normal mode



Connector ST2 Power supply

Connector ST1 incremental signals

**Connector ST3** absolute signals relays, analog/out and analog/in



- Connector ST5 RS-232 interface

Connector ST4 incremental signals

### Lockable measuring systems



Z58-000-E\_26-05 Subject to modifications - © ELGO Electric GmbH 2005

# **Z58 - Universal Position Indicator**

# Type designation Position Indicator Universal single axis SN-Number 600 = Standard 601 = First special version 602 = Second special version etc. Power supply voltage

Power supply voltage

024 = 24 VDC (+/-20 %)

115 = 115 VAC - 50/60 Hz (+/- 10 %) only with incremental signals! 230 = 230 VAC - 50/60 Hz (+/- 10 %) only with incremental signals!

Signal inputs

1 = A/B/Z 24 VDC Encoder supply, 24 V- output level (PNP) - 100 KHz 2 = A/A' B/B' Z/Z' 24 VDC Encoder supply, 5 V-TTL (PNP)- 100 KHz

3 = A/A' B/B' Z/Z' 5 VDC Encoder supply, 5 V-TTL (PNP) - 100 KHz 4 = Modulated for connection with ELGO - FMAX linear encoder

5 = Modulated for connection with ELGO - EMAX resp. FEMAX linear encoder

6 = SSI interface

7 = A/B/Z 5 VDC Encoder supply, 5 V-TTL output level (PNP) - 100 KHz 8 = A/A' B/B' Z/Z' 24 VDC Encoder supply, 5 V-TTL (PNP) - 500 KHz 9 = A/A' B/B' Z/Z' 5 VDC Encoder supply, 5 V-TTL (PNP) - 500 KHz

**Options** 

A = Built on housing

R = Two 24 VDC/1 A Relay-outputs (shutters)

= Analog input 0... 10 V (in preparation)

= Analog input 0... 20 mA (in preparation)

= Analog output 0... 10 V

G = Analog output 0... 20 mA

H = Analog output 4... 20 mA

= 5-pin connector (Phoenix) for encoder (= replace Z54)

D 6 = 9-pin connector (D-SUB) for LMIX/EMIX (= replace Z54)

### Technical specifications

Power voltage : 24 VDC +/- 20 % (if a 115 or 230 VAC Version is needed, please use an external power pack e.g. ELGO NG13-0)

Consumption : max. 70 mA (without encoder)

System accuracy : +/- 1 Digit
Operating temperature : 0° C + 50° C
Stock temperature : -40° C +70° C

Display window : 14 mm high LED red, 6 Decades

PC- Interface : Standard RS-232

SSI – Interface\* : Standard SSI, as absolute measuring-input

Protection class (front side) : IP43 (installed state)

Analog input \* (Option) : 10 Bit A/D – Converter, 0... 10 VDC or 0... 20 mA

Analog output (Option) :  $12 \text{ Bit D/A} - \text{Converter}, 0 \dots 10 \text{ VDC (Imax} = 5 \text{ mA) or } 0 \text{ (4)} \dots 20 \text{ mA (Rmax} = 200 \text{ Ohms)}$ 

Relay outputs : Potential free shutters 24 VDC/ max. 1 A

Power down memory : EEprom

Inputs : max. input current 10 mA PNP (active high), 24 VDC
Encoder supply : 24 VDC, max. 75 mA load by encoder or measuring system

Housing : Aluminium, black Housing dimensions:

**Panel version** (standard) b x h : 96 x 72 mm (cut out 93 x 67 mm)

Install depth with screw terminals : 78 mm
Install depth with SUB-D connectors : 115 mm
Built on version (Option A): b x h : 107 x 76 mm

Install depth : 95 mm (160 mm with power-connector)

Mounting holes : 2 x M5 max. 7 mm deep, bore hole distance 60 mm \* in preparation











Measure / Control / Position





**Z58-6XX** series

Universal single axis position indicator