![ELGO ELECTRONIC logo]

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 news encoder types are available .
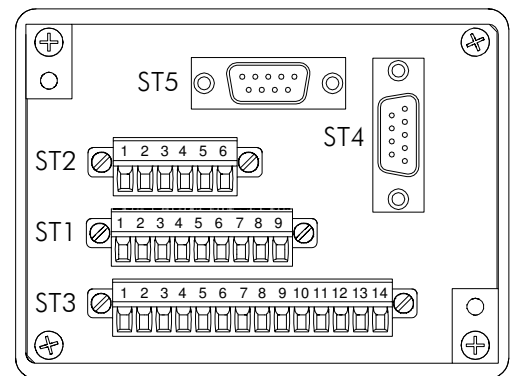

Panel housing (standard)

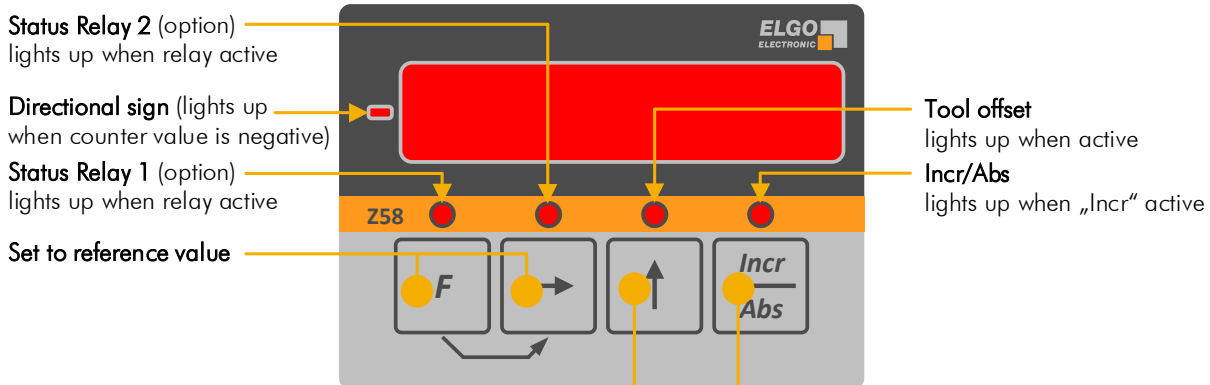Built-on housing (option AG)

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
- RS232intrerface (transmission of actual value)
- All connections are pluggable

) Limited range of functions and different rear panel

### Terminal Assignment (rear)

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
lights up when active

Incr/Abs
lights up when „Incr" active

Tool offset*   Absolute / Relative measurement*
) only in „Normal Mode"

Compatible Measuring Systems

Inkremental encoders: Absolute encoders:
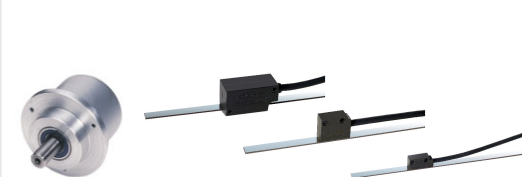
| Rotary encoders | ELGO EMIX, LMIX, DMIX, GMIX | ELGO RMIX | ELGO PMIX | ELGO FMIX | ELGO EMAX/FEMAX/ |
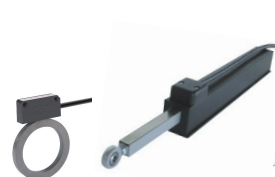
Z58 - Universal Position Indicator for incremental and absolute Encoders

Technical Data:

Mechanical Data

Housing	panel housing (standard) or built-on housing (option A)
Housing material	aluminium, black
Housing dimensions (W x H)	panel housing (standard): W x H x D = 96 x 72 x 70 mm built-on housing (option A): W x H x D = 71.3 x 102.6 x 95 mm
Panel cut out (W x H)	W x H = 93 x 67 mm
Keyboard	foil with short stroke keys
Installation depth	78 mm (including screw terminals) 115 mm (including D-SUB connector)

Electrical Data

Display	6-digits LED (red, digit height: 14 mm)
Accuracy	$\pm$ 1 Digit
Power supply voltage	Standard: 24 VDC $\pm$ 20 % Version Z58-654-115-X-A: 115 VAC Version Z58-654-230-X-A: 230 VAC
Current consumption	70 mA (without measuring system)
Signal inputs	HTL / TTL / RS422 (depends on order)
Incremental channels	A, B resp. A, A', B, B', Z, Z'
Absolute channels	RX, RX', TX, TX'
Input frequency	max. 100 KHz (optionally 500 KHz)
External inputs	3 digital inputs (set functions) characteristics: PNP, active high switching voltage: +24 VDC input current: max. 10 mA
Relay outputs	2 potential-free shutters (24 VDC / max. 1 A)
Analog outputs (option)	12 Bit, 0... 10 VDC (max.= 5mA) or 0 (4)... 20mA (Rmax = 200 Ω)
Interfaces	RS232 (transmission of actual value)
Connections	pluggable screw terminals and 9 pin (female) D-SUB connectors
Data memory	EEPROM
Optional accessories	external power pack NG24.0 for 115/230 VAC supply

Environmental conditions

Operating temperature	0 ... +50 °C
Storage temperature	-20 ... +80 °C
Humidity	max. 80 %, non-condensing
Protection class (front)	IP43 (installed state)
Protection class (rear)	IP40

Type Designation:

For orders please use the following code:

Z58 - _ _ _ - _ _ _ - _ - _ _ _ _ _
　　　A AA - B B B - C - D DD D D

A SN Number
　600 = *ELGO* standard
　601 = first special version
　602 = second special version etc.

B Power Supply Voltage
　024 = 24V DC ($\pm$ 20 %)

C Measuring System (Channels - Supply - Levels - F_{max})
　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
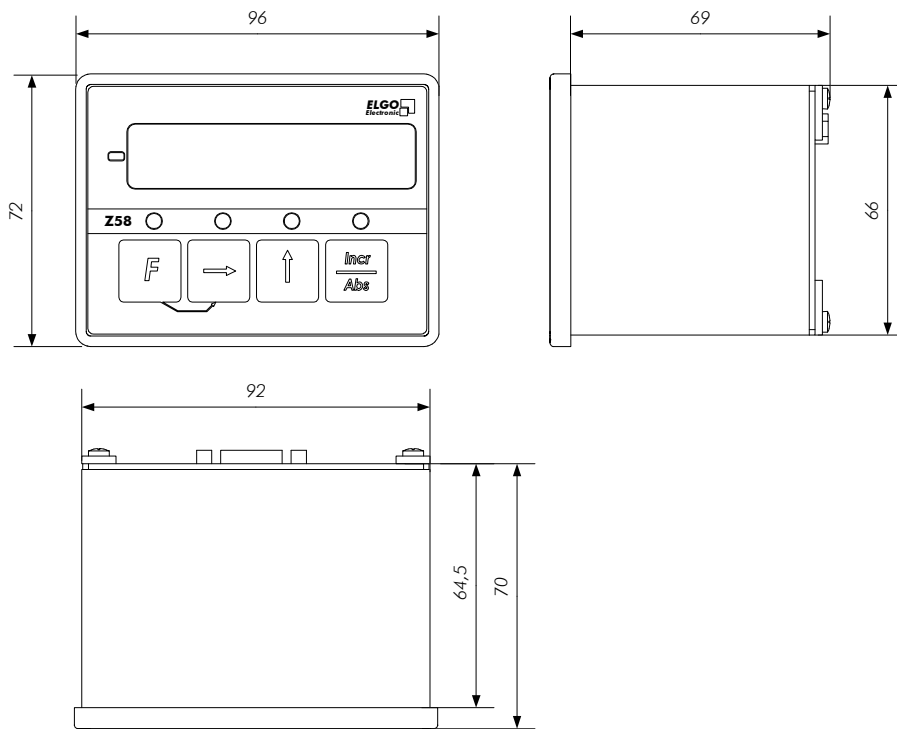
* Multiple indications possible

Example:

Z58 - 6 0 0 - 0 2 4 - 1 - A _ _ _ _
　　　A A 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.
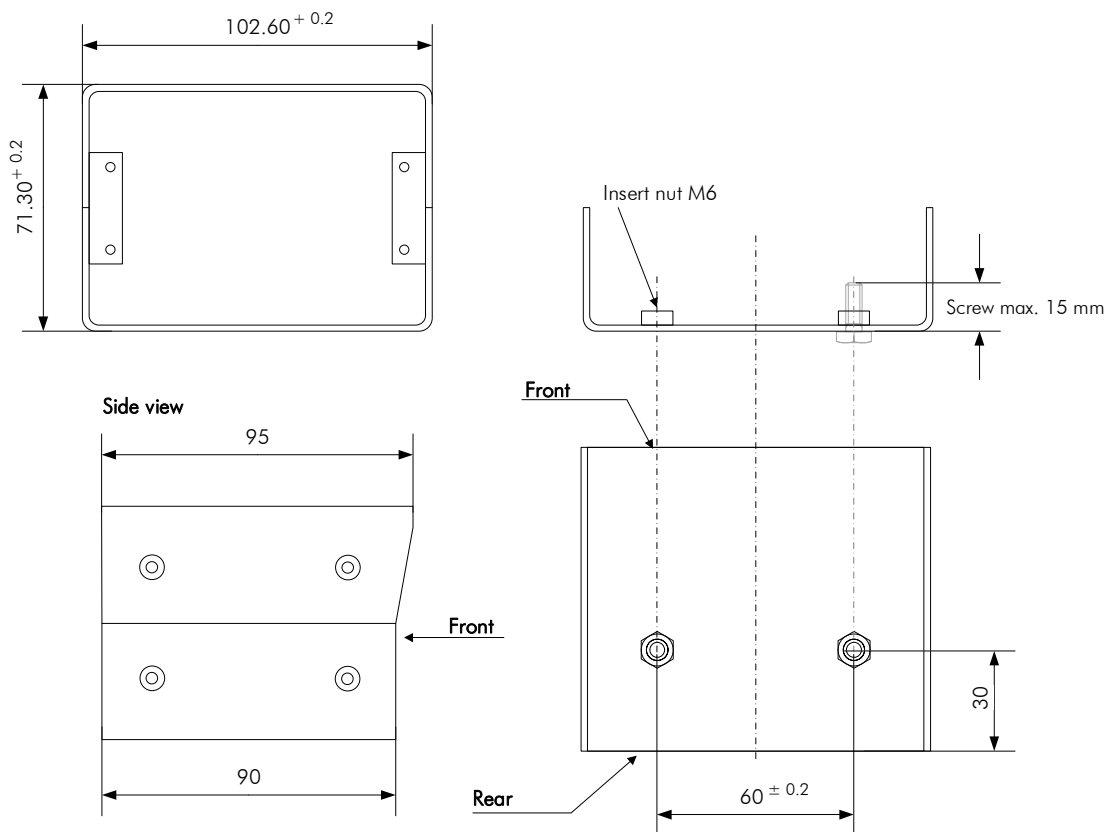
Your order:

Z58 - _ _ _ - _ _ _ - _ - _ _ _ _ _
　　　A A A - B B B - C - D D D D D

Dimensions of Panel Housing (Standard):

96

72

Z58

Incr / Abs

69

66

92

64,5

70

Dimensions of Built-on Housing (Option AG):

102.60 + 0.2

71.30 + 0.2

Insert nut M6

Screw max. 15 mm

Front

Side view

95

Front

Rear

90

30

60 ± 0.2

Accessories for Z58:

Order Designation	Description
NG24.0	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.