

2/3 axes Position Indicators Z59 and Z89

- 1-, 2- and 4 edge multiplier
- Sign +/-
- Adjustable pulse factor
- Power down memory
- Tool offset
- Datum value
- Selectable decimal point
- Absolute/incremental switch over
- Inch/mm switchover
- Digital brightness control for display
- Up/down switchover
- External Reset or Set-Inputs (Option E)

The Z59 and Z89 indicators were developed for 2/3 axes evaluation (at Z89 there's also only one axis possible).

An extensive standard menu allows an individual modulation to the desired demands.

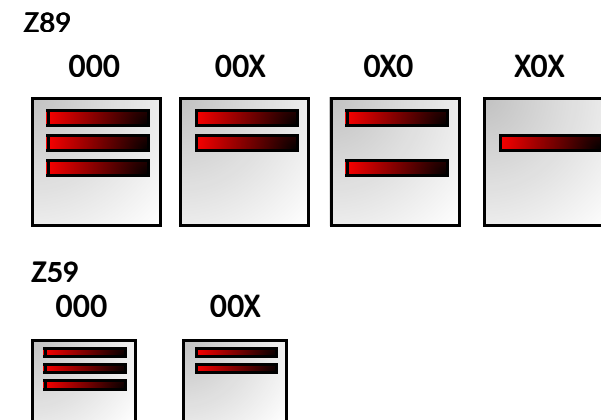
The measuring inputs can be modulated to different measuring systems.

For example:

1. Axis 5 V-TTL input
2. Axis 24 V Level input
3. Axis magnetic sensor input

Specific details see in the „Type designation“

The following combinations of displays are available (the **X**-marked displays/axes are not populated, **0** means: this axes must be connected via Phoenix screw terminals and evaluates 24 V- levels from commercial rotary encoders) :



Specific details see in the „Type designation“

Many different incremental measuring systems can be connected to Z59/Z89. Levels and measuring systems are encoded by different letters or figures in the type designation (axes **X**, **Y** and **Z**) and can be ordered as desired.



2/3 axes Position Indicators Z59 and Z89

Type designation

Z 59 - 000 - 024 - XYZ - XXXX
Z 89 - 000 - 024 - XYZ - XXXX

Z = counter/indicator

Type 59 or 89

Version

000 = Standard

001 = first special version

Supply

024 = 24 VDC, +/- 10 %

115 = 115 VAC only **Z89**

230 = 230 VAC only **Z89**

Measuring system input (axes X, Y, Z)

0 = A, B 24V/24V- 20 KHz PNP (Phoenix connector)

1 = A, B, 0 24V/24V- 20 KHz PNP (D-SUB Connectors) **at Z59 only Phoenix connectors**

2 = A /A' B/B' 24V/TTL-100 KHz PNP (D-SUB Connectors) **at Z59 only A/B (Phoenix connectors)**

3 = A /A' B/B' Z/Z' 24V/TTL-100 KHz PNP (D-SUB Connectors) **only Z89**

4 = A /A B/B' Z/Z' 5V/TTL-100 KHz PNP (D-SUB Connectors) **only Z89**

5 = A/B 5V/5V PNP (Phoenix- connectors) **only Z89**

9 = A/B Modulation for magnetic sensor MS **only Z59**

M = A/B Modulation for ELGO measuring systems MIX/LMIX/EMIX/PMIX/FMIX

N = A/B/Z Modulation for ELGO measuring systems MIX/LMIX/EMIX/PMIX/FMIX

X = **Axes not active** (if 1 axis or 2 axes version desired)

Options

A = built on housing

S = serial interface RS 232

E = external inputs

Technical specifications

Display	: 7 digits with sign digit height: 14 mm (Z89) resp. 10 mm (Z59)
Power supply	: 24 VDC, +/- 10 % or 115 VAC/230 VAC +/- 10 % (only Z89)
Consumption without measuring system	: max. 50 mA
Operating temperature	: 0° ... + 50° C
Supply of measuring system	: stabilized 24 VDC +/- 10 %
Counting frequency of measuring system	: 20 KHz PNP, at 24 V level (more on request) 100 KHz at inverted TTL-Signals
Index input (Z)	: edge triggered
Input signals	: PNP (active high), pulse time min. 300 msec
Measuring system inputs	: PNP (active high)
External inputs (Option E)	: PNP, positive Logic
Power down memory	: NOVRAM (service life approx 10 years)

Housing Z59	: black Aluminium panel- or built on housing
Dimensions of housing Z59	: panel: wide 96 mm x height 72 mm built on: wide 107 mm x height 76 mm
Install depth (panel version) Z59	: panel 68 mm, built on 170 mm (inclusive connectors)
Depth (built on version) Z59	: 170 mm inclusive connectors
Cut out panel Z59	: wide 92 mm x height 66 mm
Protection class Z59	: in mounted status IP40

Housing Z89	: black Aluminium panel- or built on housing
Dimensions of housing Z89	: wide x height = 144 x 144 mm
Install depth Z89	: panel 80 mm, built on 150 mm (inclusive connectors)
Cut out panel Z89	: wide x height = 138 x 138 mm
Protection class Z89	: in mounted status IP43, IP 00 as built on housing

Accessories: external 115/230 VAC power pack for Z59, designation: **NG13.0**



Z59 and Z89 series

2/3 Axes- Position Indicators