Z20 series - Mini Position Indicator

- Power down memory
- Datum value
- Multi edge triggering
- Selectable decimal point
- Programmable scaling factor
- Sign for counting direction
- Digital brightness control
- Up/Down- or Differential counting mode
- Connection for magnetic sensor available (SN005)

Standard Z20-000

Z20 provides a rugged cost effective quality panel mounting instrument. This small, compact unit has an 8 mm high, red LED display and provides a convenient, precise and easily readable indication of position. Using the dust-tight keypad (and external signal if required) the display can be reset or preset a datum value. The standard unit evaluates conventional, incremental square waves (Channels A,B and Z) of optical rotary encoders and also the magnetic ELGO measuring systems LMIX, EMIX, MIX, PMIX and FMIX (if ordered with measuring system index M or N).

See "Type designation"

Special version Z20-005

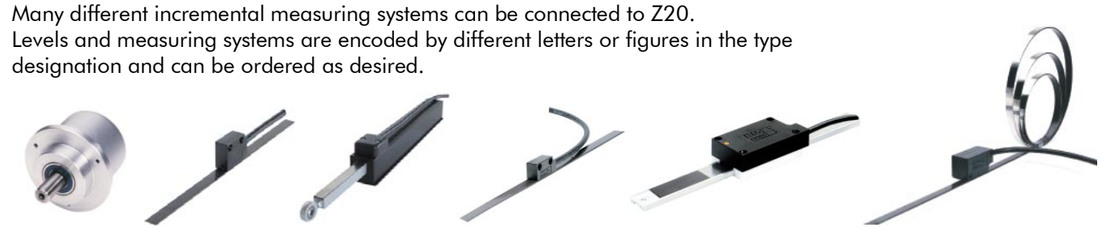
The special version Z20-005 is equipped with a connector to the magnetic sensor ELGO-MS20.60.

The translator circuit is already integrated in the unit. For correct measuring, a magnetic tape with 5 mm pole distance is necessary (e.g. ELGO MB20.50).



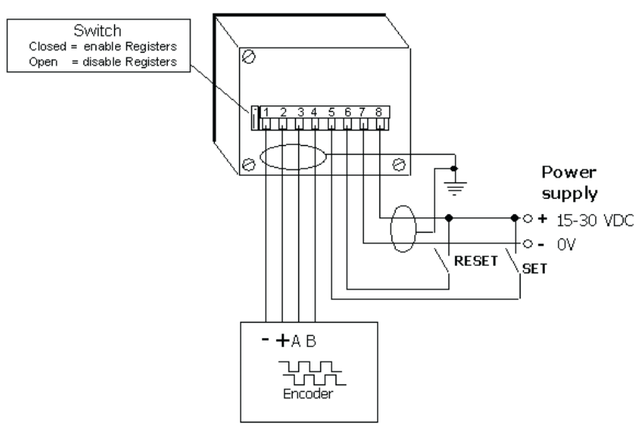
Z20 (SN005)
with magnetic sensor MS20.60

Many different incremental measuring systems can be connected to Z20.
Levels and measuring systems are encoded by different letters or figures in the type designation and can be ordered as desired.

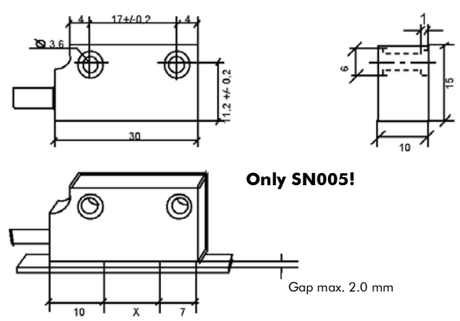


Rotary encoders | ELGO LMIX/EMIX2 | ELGO PMIX | Sensor MS20.60 | ELGO FMIX | ELGO LMIX3

Connections:



Dimensions of sensor MS20.60



Subject to modifications © ELGO Electric GmbH 2003

Z20 series - Mini Position Indicator

Type designation

Z20 - 000 - 024 - X - X

Counter/Indicator

Version
000 = Standard , 005 = Connection for magnetic sensor MS20.60

Supply
024 = 24 VDC +/- 10 %

Measuring system
1 = A/B/Z
M = A/B Modulation for ELGO measuring systems MIX/EMIX/LMIX/PMIX/LMIX
N = A/B/Z Modulation for ELGO measuring systems MIX/EMIX/LMIX/PMIX/LMIX

Options
None

Accessory: External power pack — **NG20.0**
(Norm rail installation)
primary 115/230 VAC
Output 16 VDC / 100 mA

Technical specifications

Indicator Z20

Supply voltage:	15 - 30 VDC (not stabilized)
Power consumption:	1 VA
Counting frequency:	20 KHz = 2 m/s, resolution 0.1 mm (more on request) At SN005 = 2,5 m/s, resolution 0.01 mm
Display:	8 mm high red LED, 5 digits with +/- sign
Input signals:	Square waves with 90° phase offset, Level: 12 V
External inputs:	potential free contacts (max. 10 Hz)
Memory:	in power down status all parameters and the actual value will be stored in an EE-prom
Operation temperature:	0...50 °C
Housing:	panel housing (plastic, black)
Protection	IP40 (installed state)
Dimensions of housing:	w x h = 72 x 48 mm
Panel cut out:	w x h = 69 x 45 mm
Install depth:	77 mm inclusive connections

NG 20.0 (Accessory, external power pack):
If there's no DC-Voltage available, please use the external power pack ELGO-NG20.0!

Primary voltage:	230 VAC/50 Hz, or 115 V/60 Hz +/- 10%.
Secondary voltage:	+ 16 VDC, not stabilized, max. 300 mA
Dimensions:	DIN-Norm rail housing, H= 80 mm, W= 45 mm, D= 60 mm with clamping screws.

Magnetic Sensor MS 20.60 (only SN005)

Maximum speed:	3,2 m/sec.
Cable length:	1m, 3m, 5m, 8m, 10m, 15m
Cable diameter:	5.3 mm
Cable bends radius:	min. 60 mm
Connector diameter:	12.5 mm
Housing:	Metal
Protection:	IP 67
Mounting attitude:	any
Housing material:	Die cast zinc
Max. distance to the tape:	0.1 mm... 0.8 mm
Temperature:	0°... + 50 °C

Magnetic Tape MB 20.50

Available lengths:	0.5 ...25 m
Repeat accuracy	0.01 mm
Accuracy at 20°C in mm:	+/- (0,025 + 0,02 x L) (L = Length in m)
Temperature coefficient:	0,000016 x 1/°C
Operating temperature:	0°... + 50 °C
Protection:	IP 65
Dimensions:	10 mm x 1.8 mm x length









ELGO ELECTRIC

Positioning- und
Length measuring systems
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Z20 series

Programmable Mini Position Indicator