

# MAGNESCALE

digital counter for digital scales and rulers



## Series LG20

Key-Features:

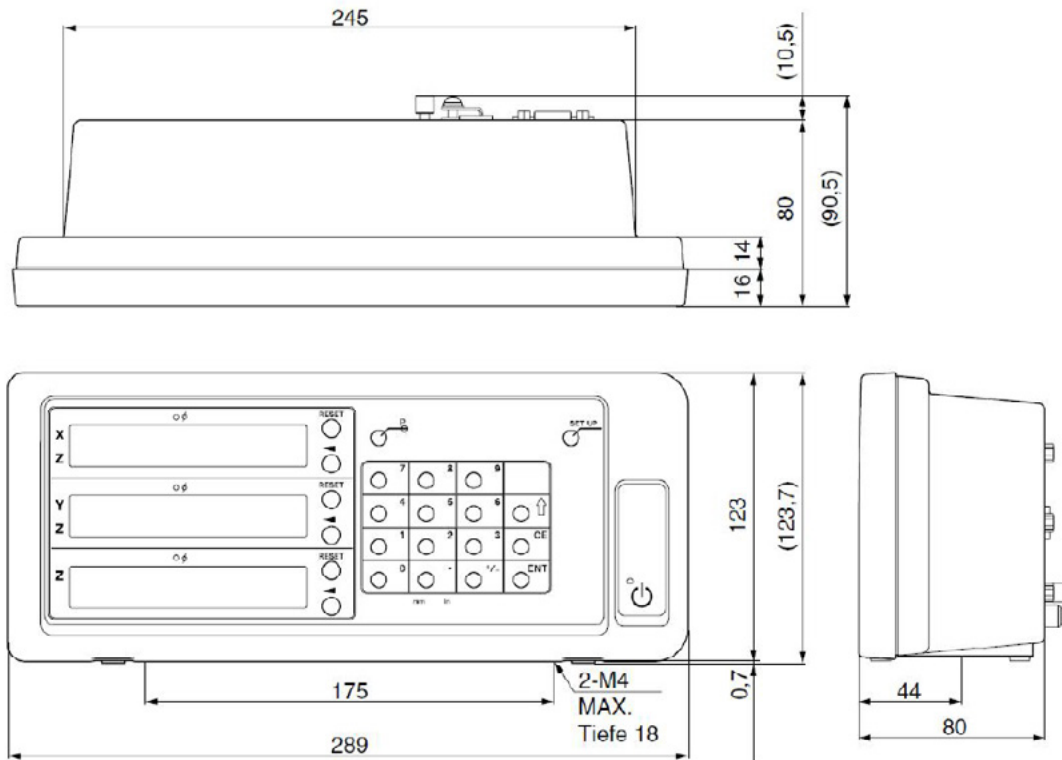
- selectable display resolution
- Input signal: A/B quadrature (according to RS422)
- Machine error compensation
- Models with 1, 2, or 3 axis
- up to 3 preset values per axis
- Flicker control
- Data storage

**Content:**

## TECHNICAL DATA

	LG20-1	LG20-2	LG20-3
Number of axis	1	2	3
Display	7 digits and minus display, color amber		
Connectable measuring unit	Series GB-ER, Series SJ300, Series SJ700A, Reading head PL20C		
Resolution	0.1 µm, 0.5 µm, 1 µm, 2 µm, 5 µm, 10 µm, 20 µm, 25 µm, 50 µm, 100 µm		
Input signal	A/B quadrature, TTL (according to RS422)		
Minimum input phase difference	100 ns		
Quantization error	±1 count		
Alarm display	yes		
Preset	it is possible to store / call 3 values per axis		
Data storage	the value displayed before the power was turned off and the setting values are stored		
linear error compensation	a fixed compensation is applied to the measuring units count value		
Power supply	12 DCV, rating 0.75 A max. 1 A / 100 - 240 VAC ±10% (when using a power supply unit)		
Power consumption	max. 32 VA (connected to AC power supply)		
Working temperature	0...+40 °C		
Storage temperature	-20...+60 °C		
Weight	approx. 1.5 kg		

## TECHNICAL DRAWING MAGNESCALE



## FEATURES

### Display resolution switching

The display resolution can be selected from: linear 0.1  $\mu\text{m}$  to 100  $\mu\text{m}$  and diameter display

The correct setting depends on the used scale and is shown in the table below:

	Resolution	Type of connection
Series GB-ER	0.5 $\mu\text{m}$	direct
Series SJ300	1 $\mu\text{m}$	direct
Series SJ700A	5 $\mu\text{m}$	direct
Series PL20C	10 $\mu\text{m}$	direct
Series DG-B	0.5 $\mu\text{m}$	with adapter (sold separately) + DZ51

### Machine error compensation

The LG20 compensates errors arising from the inclination or deflection of a machine tool and displays the actual displacement of the machine. Thus the displayed value accords with the actual displacement of the work piece to achieve high-accuracy positioning and restoration of machine tool accuracy. (Linear compensation).

### Data storage

Data on the display and preset data are held automatically. Therefore, data is retained even after power is turned off or in case of a temporary power outage.

### Flicker control

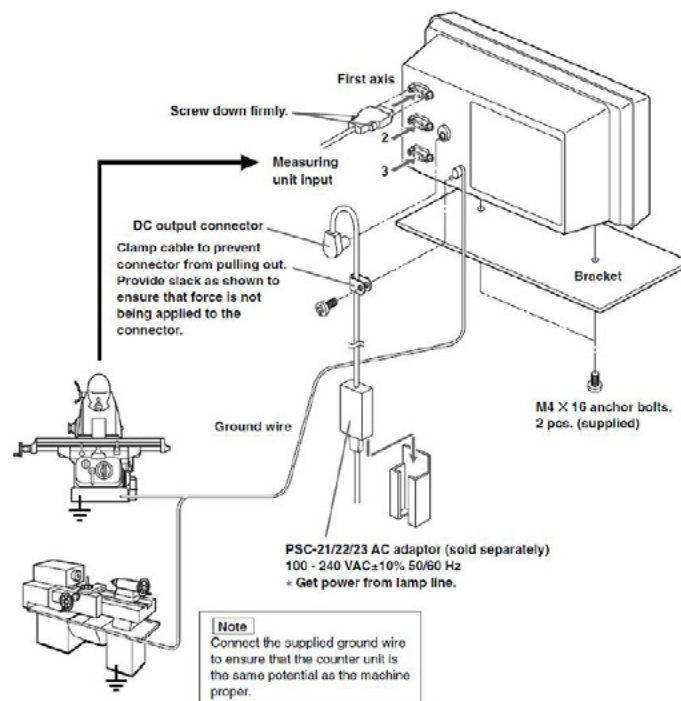
This reduces noticeable display flicker in cases such as when a high-resolution measuring unit is connected or when the measuring system is exposed to large vibrations.

### Alarm display

In the following cases the alarm will be activated and the display will show an error message (exact description in the manual):

- measuring unit disconnected
- displacement speed too high
- maximum display amount exceeded
- power failure
- error in stored data

## CONNECTION



## ORDER CODE

LG20-

1	1 axis
2	2 axes
3	3 axes

## ACCESSORIES

**Power supply unit for display**

**PSC23** Power supply unit

Subject to change without prior notice.