

MAGNESCALE

digital counter for digital scales and rulers



Series LG20

Key-Features:

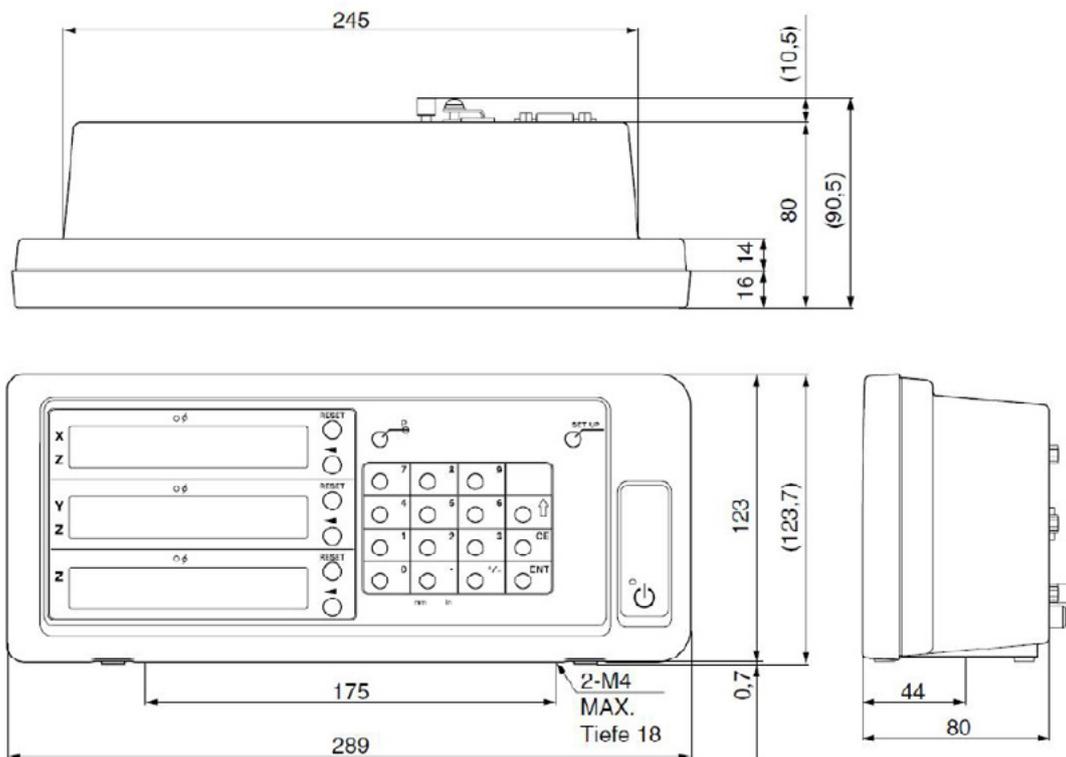
- selectable display resolution
- Input signal: A/B quadrature (according to RS422)
- Machine error compensation
- Models with 1, 2, or 3 axis
- up to 3 preset values per axis
- Flicker control
- Data storage

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 μm to 100 μm 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 μm	direct
Series SJ300	1 μm	direct
Series SJ700A	5 μm	direct
Series PL20C	10 μm	direct
Series DG-B	0.5 μm	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

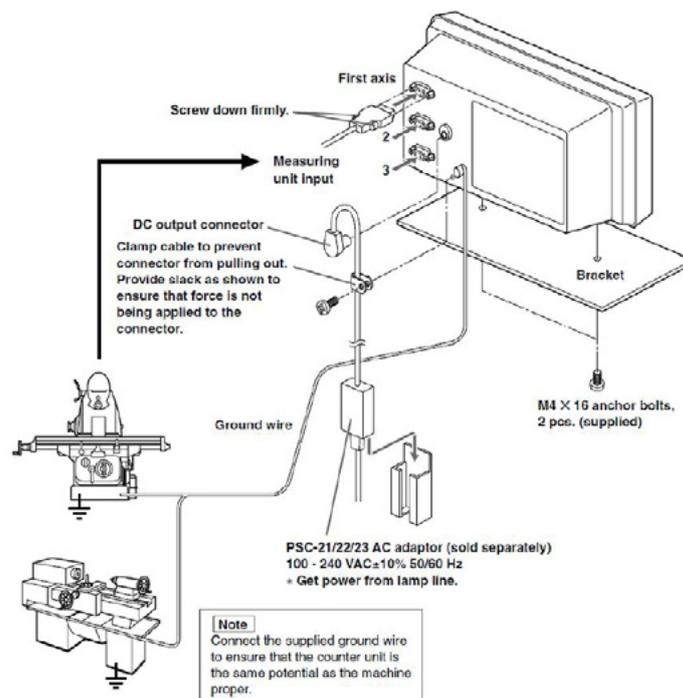
This reduces noticeable display flicker in cases such as when a high-resolution measuring unit is connected or when the measuring system is exposed to large vibrations.

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.