

# MAGNESCALE

digital magnetic scale



## Series SJ700A

Key-Features:

- available measurement ranges: 150 to 1600 mm
- Resolution 5  $\mu\text{m}$
- Linearity up to  $\pm 10 \mu\text{m}$
- Output signal A/A\*, B/B\*, TTL-Linedriver according to EIA-422
- Displacement speed up to 60 m/min
- Working temperature 0...+40 °C
- Protection class IP54
- very robust and resistant against vibrations
- easy mounting
- resistant against water and oil

### Content:

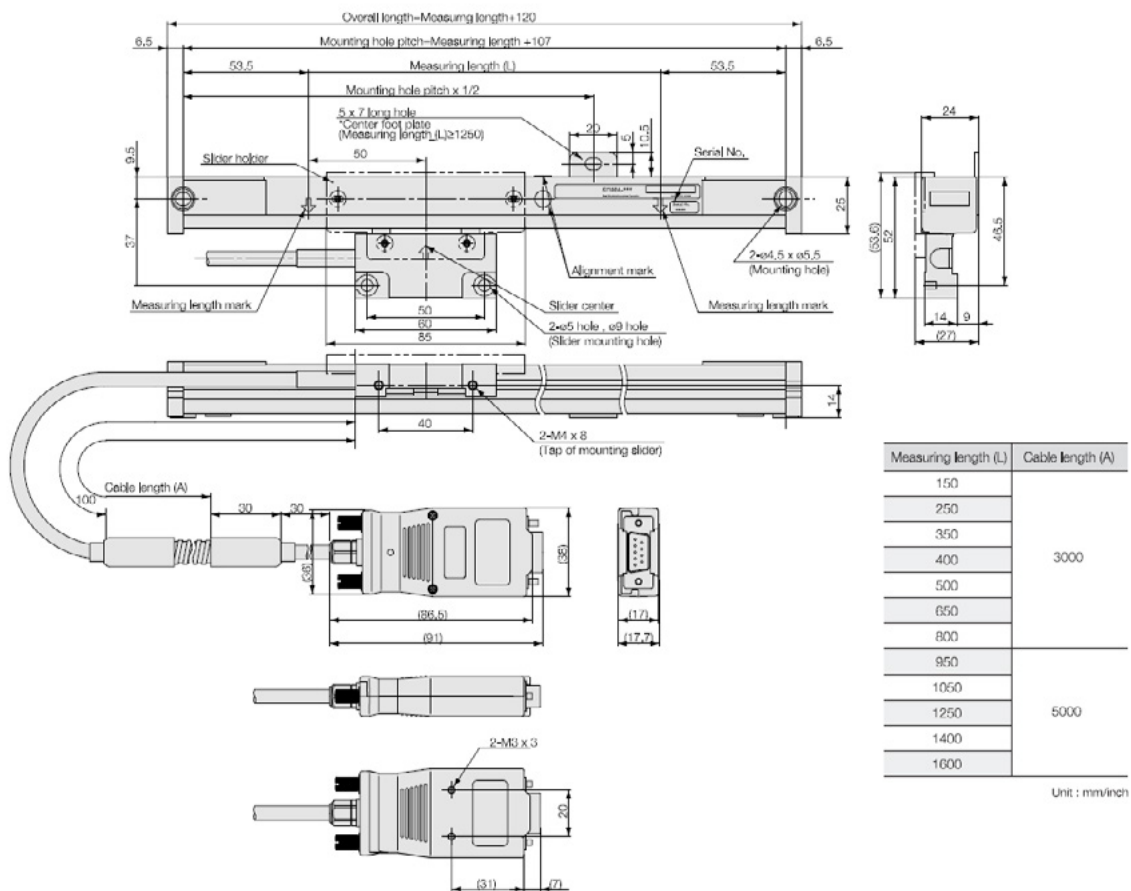
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## TECHNICAL DATA

Model		
Measurement range MR	[mm]	150 / 250 / 350 / 400 / 500 / 650 / 800 / 950 / 1050 / 1250 / 1400 / 1600
Resolution (20°C)	[µm]	5
Linearity (20°C)	[µm]	±10 (bis MB ≤ 800 mm), ±15 (bis MB ≥ 950 mm)
Reference point		none
Working temperature	[°C]	0 up to 40
Storage temperature	[°C]	-20 up to 50
Displacement speed	[m/min]	maximum 60
Expansion coefficient		(12 ±1) × 10 <sup>-6</sup> /°C
Protection class		IP54
Cable length	[m]	3 (bis MB ≤ 800 mm), 5 (bis MB ≥ 950 mm)
Scale length	[mm]	MB + 120
Output signal		TTL Linedriver (RS422), AB / Quadratur Signal, Z
Power supply	[VDC]	5 ±5%
Connector		Sub-D connector, 9-pole
Current consumption	[mA]	maximum 200
Displays		direct connection: LG20, LH70, LH71, LH72, LY71, LY72 / with adapter cable CKT157: LT30, MG10/20/30

## TECHNICAL DRAWING

### Scale



# DISPLAY MAGNESCALE

## LG20:

General purpose display. The LG20 offers a Reset/Preset function

## LH70 Serie:

High performance counter for Mille (LH70/LH71) and Lathe (LH70-3/ LH71-3) applications.

## LH71A-3

Can be user for milling machines and lathes applications by switching initial settings.

## LH72

Designed especially for lathes.



### Overview Series

	LG20	LH70/LH71	LH72
Display axes		1, 2, 3	3
Display	7 Ziffern und Vorzeichen, Farbe orange		
Display resolution	0.1 / 0.5 / 1 / 5 / 10 µm		0.1 / 0.5 / 1 / 5 / 10 µm
			1 s / 10 s / 1 min / 10 min
Input signal	TTL Line driver RS422		
Power supply	12 VDC using separate power supply unit PSC23 with 100 - 240 VAC		
Weight		1.5 kg	

### Functions of the displays

	LG20	LH70	LH71	LH71A	LH72
Reset	■	■	■	■	■
Preset	■	■	■	■	■
Absolute/Incremental		■	■	■	■
Diameter display	■	■	■	■	■
Angle display		■	■	■	■
Alarm display	■	■	■	■	■
Zero point detection		■	■	■	■
Datum points		10	150	150	
Tool memory *		12	99	99	99
Midpoint calculation		■	■	■	■
Scaling			■	■	■
Addition function *		■	■	■	■
Programming function			■	■	■
Bolt hole circle		■	■	■	
Line hole			■	■	
Simple R cutting		■	■	■	
Linearity error compensation	■	■	■	■	■
Segment error compensation			■	■	■
Data storage	■	■	■	■	■
Energy saving function	■	■	■	■	■
Navigation function		■	■	■	■
External reset				■	■
Touch sensor function				■	

\* only 3-axes display

## ORDER CODE MAGNESCALE

<b>SJ700A-015</b>	<b>Measurement range 150 mm</b>
<b>SJ700A-025</b>	<b>Measurement range 250 mm</b>
<b>SJ700A-035</b>	<b>Measurement range 350 mm</b>
<b>SJ700A-040</b>	<b>Measurement range 400 mm</b>
<b>SJ700A-050</b>	<b>Measurement range 500 mm</b>
<b>SJ700A-065</b>	<b>Measurement range 650 mm</b>
<b>Display</b>	
LG20-1	Digital display 1 axis
LG20-2	Digital display 2 axes
LG20-3	Digital display 3 axes
LH70-1	High performance display 1 axis
LH70-2	High performance display 2 axes
LH70-3	High performance display 3 axes
LH71-1	High performance display 1 axis
LH71-2	High performance display 2 axes
LH71-3	High performance display 3 axes
LH71A	High performance display 3 axes
LH72-3	High performance display 3 axes
LY71	2 channel multifunctional Display
LY72	2 channel multifunctional Display, RS232C

<b>SJ700A-080</b>	<b>Measurement range 800 mm</b>
<b>SJ700A-095</b>	<b>Measurement range 950 mm</b>
<b>SJ700A-105</b>	<b>Measurement range 1050 mm</b>
<b>SJ700A-125</b>	<b>Measurement range 1250 mm</b>
<b>SJ700A-140</b>	<b>Measurement range 1400 mm</b>
<b>SJ700A-160</b>	<b>Measurement range 1600 mm</b>
<b>Adapter cable for connection to LT30 / MG10,20,30</b>	
CK-T157	cable length 30 mm
<b>Power supply unit for displays</b>	
PSC23	Power supply unit

Subject to change without prior notice.