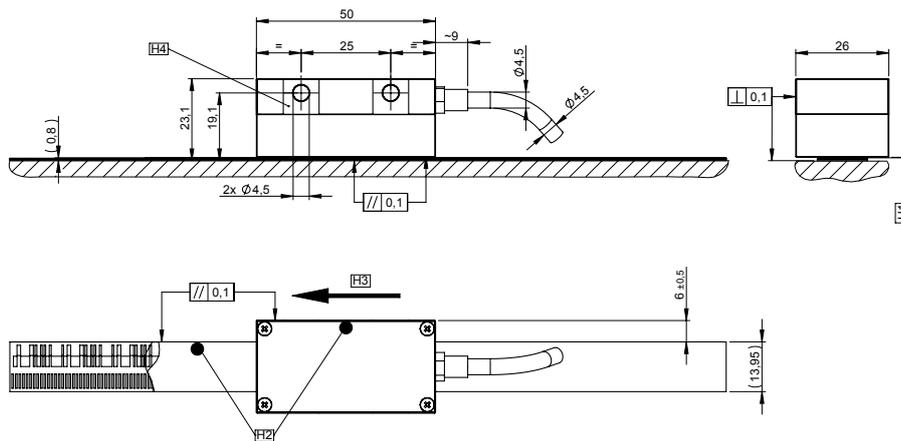


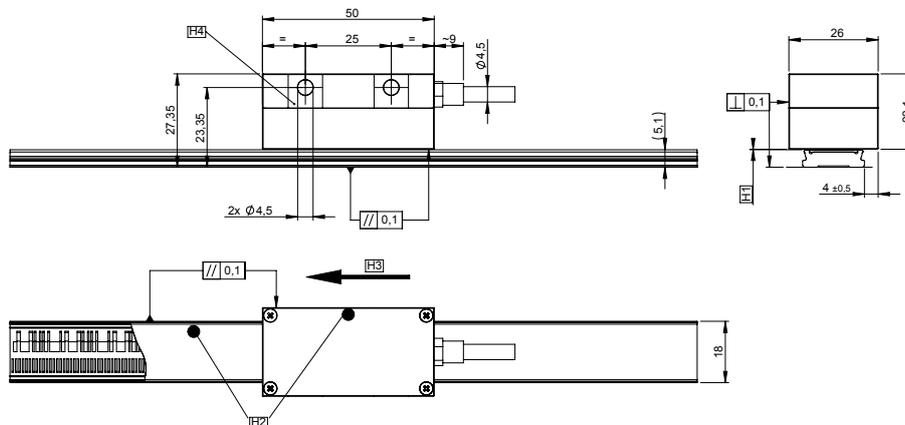
Scanning head - LMKA 2010 series

- Absolute, modular linear encoder
- Grating period 1000µm
- Encoder with integrated electronics
- In combination with scale type LMBA 2010 and LMTA 4010

Design 20 with scale type LMBA 2010



Design 20 with scale type LMTA 4010



Tolerance principle in accordance with SO8015
General tolerances in accordance with ISO 2768-fH
All dimensions in mm

H1 = Air gap $0,15 \pm 0,10$ mm, set with spacer foil
H2 = Absolute track marking
H3 = Direction of scanning head movement for positive counting
H4 = Ground plane

Technical data

- LMKA - Scanning head for modular linear encoders
- Grating period 1000 μ m

Scanning head	LMKA 2010					
Interface	EnDat 2.2	Fanuc α	BiSS/C	Mitsubishi (full duplex)	Mitsubishi (half duplex)	SSI + 1Vpp
Designation	EnDat 2.2	Fanuc02	BiSS	MitA1-4	MitA1-2	SSI - 1Vpp
Clock frequency	≤ 16 MHz	-	$\leq 2,5$ MHz	5 Mbps	5 Mbps	≤ 1 MHz
Measuring step						
Standard	1 μ m or 0,25 μ m					
High Accuracy	0,1 μ m					-
Position deviation per grating pitch ¹⁾						
Standard	$\pm 2\mu$ m					
High Accuracy	$\pm 0,5\mu$ m					-
Max. speed	20m/s					
Cable length on scanning head	0,5m to 6m					
Electrical Connection	Cable with M12 coupling, 8pin male					Cable with M23 coupling, 12pin male
Voltage supply	DC 3,6V to 14V					
Power consumption	$\leq 1,5$ W at 5V					
Typical current consumption	300mA at 5V					
Vibration 55 to 2000 Hz	< 200 m/s ² (EN 60068-2-6)					
Shock 6 ms	< 2000 m/s ² (EN 60068-2-27)					
Operating temperature	-10°C to 85°C					
Storage temperature	-20°C to 85°C					
Protection	IP67					
Mass	40g					

¹⁾ The position error per grating period and the accuracy of the grating results together in the encoder specific error; additional deviations caused by mounting and bearing are not considered in this error.

