

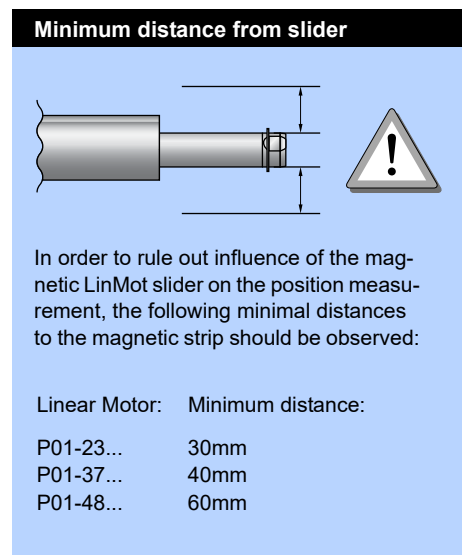
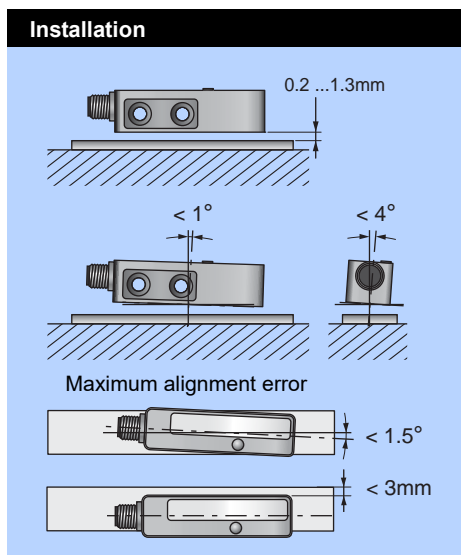
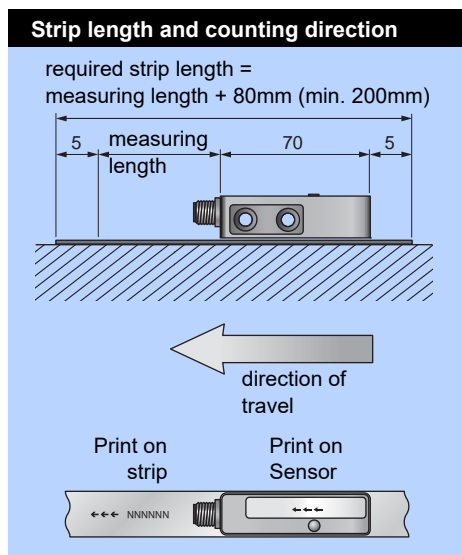
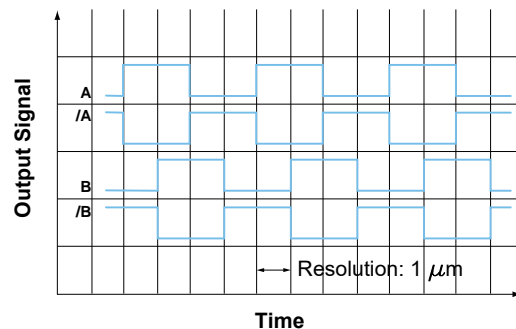
# External Position Sensor MS01-1/D-SSI

Non-contacting measuring position sensors, using magnets with integrated processing electronics for servo drives series C and E. The absolute position value can be read from an upstream control unit with a resolution of  $5\mu\text{m}$  via encoder interface. In addition, an incremental interface with quadrature signals in various resolutions is available as an option.

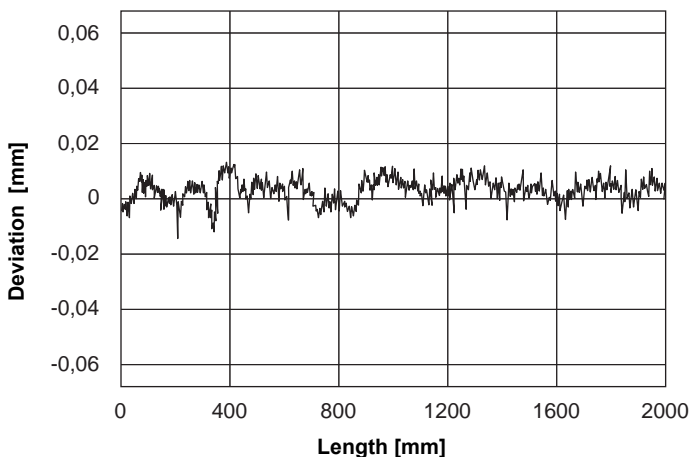
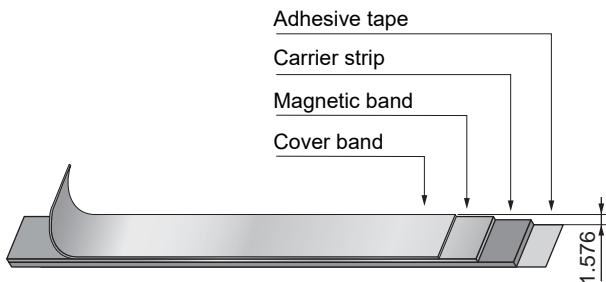
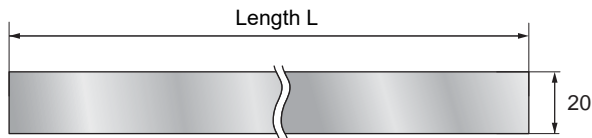
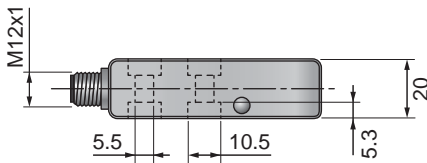
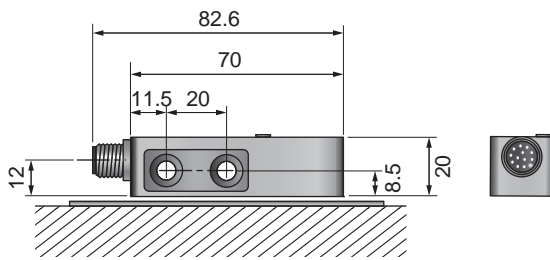
Together with the MB01-1000-ABS magnetic band, the MS01/D-SSI position sensor is part of a high-resolution, robust, linear measurement system.

Features:

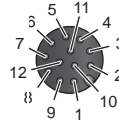
- Max. resolution:  $5\mu\text{m}$  absolute,  $1\mu\text{m}$  incremental
- Repeatability 0.005 mm
- Output circuit SSI, RS485 (absolute), LD (incremental)
- Reading distance sensor/strip max. 1.3 mm
- Max. measuring length 10.24 m
- State-LEDs for diagnosis



## Dimensions



### Connector wiring



Pin 2	D+	
Pin 3	D-	
Pin 4	T-	
Pin 5	+UB	
Pin 6	/A	
Pin 7	A	
Pin 8	/B	
Pin 9	B	
Pin 10	Config	
	GND	The sensor is in the SSI mode.
	+UB (while encoder supply is being turned on)	The sensor is in the boot loader mode for the first 10s (installing new firmware is enabled), then it changes over to the service mode.
	+UB GND mind. 1,2s	Setting of the position value to the calibration value (only if the sensor is in the SSI mode)
Pin 11	T+	
Pin 12	OV	

### Technical data magnetic band

Order length	Measuring length +8.0cm
Width	20mm
Carrier material	spring steel band
Precision class	$\pm 50 \mu\text{m}$ at 20°C
Temperature coefficient	$(11 \pm 1) \times 10^{-6} / ^\circ\text{K}$
Working temperature range	-20...70°C
Storage temperature range	-40...70°C
Protection class	IP 67
Mounting	self adhesive magnetic band

## Ordering information

Item	Description	Part Number
0150-2095	Linear Encoder 1 $\mu\text{m}$ , A/B(for absolute strip)	MS01-1/D-SSI
0150-2096	Magnetic absolute strip, 1mm pitch, per cm	MB01-1000-ABS
0150-3616	Encoder connector straight	EC01-ABS/ENC-12-S
0150-3652	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	KSS01-12-D15/ABS-ENC-