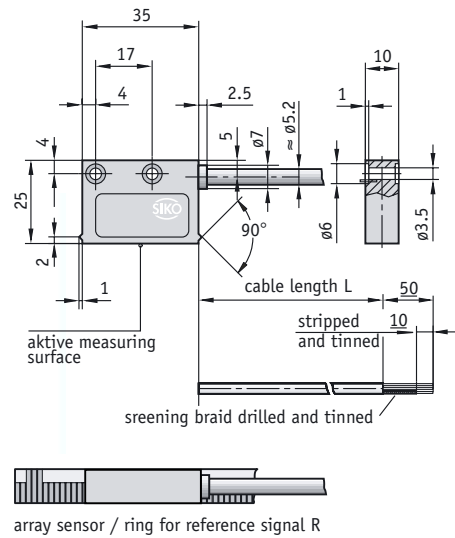


Magnetic sensor MSK500/1

Contactlessly measuring sensing unit with integrated interpreting electronics and digital signal output. Used in conjunction with the MR500 magnetic ring the magnetic sensor forms an open and robust measuring system.



Features:

- insensitive to dust, shavings, humidity
- maximum resolution 0.002°, system accuracy ±0.1°
- real-time processing
- rotary encoder system with IP67 protection class (in combination with MR500)
- fixed index signals

Scaling factor	Circumferential speed v_{max} [m/s]							
250	0.1	0.2	0.4	0.8	1.7	3.4	6.9	13.8
125	0.2	0.4	0.8	1.7	3.4	6.9	14.5	25
100	0.3	0.5	1.1	2.2	4.5	9	18	25
62.5	0.4	0.8	1.7	3.4	6.9	14.5	25	25
50	0.5	1.1	2.2	4.5	9	18	25	25
25	1.1	2.2	4.5	9	18	25	25	25
Pulse interval [t in µs]	32	16	8	4	2	1	0.5	0.25

The circumferential speed results from the selected pulse and the corresponding scaling factor. (see appendix)

Feature	Ordering data	Technical data	Additional information
Supply voltage	4 5	24 V DC ± 20 % 5 V DC ± 5 %	standard, with polarity protection
Connection/cable length	E1/2.0 E6, E8	2 m cable, flying leads E6, circular plug	standard (max. cable length = 20 m) E8, DSUB 9-pol.
Output circuit	PP LD	push pull line driver	standard RS 422
Reference signal	0 I R	without index periodical index fixed	standard
Scaling factor	250	factor 250	standard, option 125 / 100 / 62.5 / 50 / 25
Pulse interval	1	1 µs	standard, option 32 / 16 / 8 / 4 / 2 / 0.5 / 0.25
Power consumption		max. 70 mA	@ 24 V DC unloaded
Output signals		A, /A, B, /B, option: I, /I or R, /R	quadrature signal
Gap ring / sensor		0.1 - 2.0 mm, reference signal R < 1.5 mm	lateral offset ± 1 mm, angular offset ± 3°
System accuracy		± 0.1°	repeat accuracy ± 1 increment
Circumferential speed		see table	max. reference signal 5 m/s
Interference protection class		3, acc. to IEC 801	humidity: 100 % rF, condensation permissible
Temperature ranges		working temperature: -10 ... + 70 °C	storage temperature: -30 ... + 80 °C
Protection class		IP67 acc. to DIN 40050 (casing)	test mark CE
Housing		black plastic	
Cable		PUR	

Note: The internal translation module can generate rapid counting pulses whose length is limited by the pulse interval. The follower electronic must be adjusted accordingly. If necessary select the pulse interval in advance. For supply voltage 4 and output circuit LD it is necessary to use a terminating resistor of ≥ 470 Ohm to prevent thermal stress.

Your ordering: - - - - - -