

Electrical data

Feature	Technical data	Additional information
Operating voltage	4.5 ... 30 V DC	reverse polarity protected
Power input	<1 W	
SSI clock speed input	50 ... 750 kHz	
Output circuit	1 V _{pp} ±10 %	
Offset voltage	2.5 V DC ±100 mV	
Interface	SSI	service mode (RS485)
Cycle time	≤30 μs	
Type of connection	M12 plug-in connector (A-coded)	12-pole, 1x pin

System data

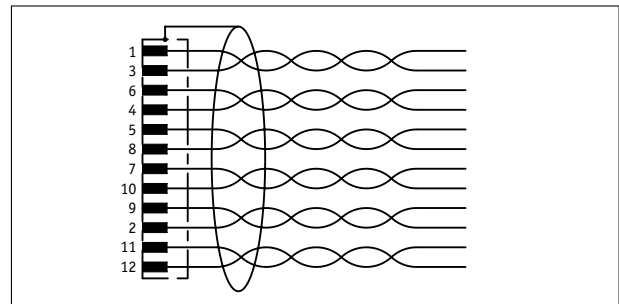
Feature	Technical data	Additional information
Pole length	5 mm	pole number 64
Resolution	12 ... 16 bit	~0.08° ... 0.005°
System accuracy	±0.1°	at TU = 20 °C, with run-out error of 50 μm
Repeat accuracy	0.01°	unidirectional
Circumferential speed	≤32 m/s	absolute value ≤3 m/s

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-20 ... 85 °C	
Storage temperature	-20 ... 85 °C	
Relative humidity	100 %	condensation admissible
EMC	EN 61000-6-2	interference resistance / immission
	EN 61000-6-4	emitted interference / emission
Protection category	IP67	EN 60529
Shock resistance	≤500 m/s ² , 11 ms	EN 60068-2-27
Vibration resistance	≤100 m/s ² , 50 ... 2000 Hz	EN 60068-2-6

Pin assignment

Signal	PIN
Sin	1
GND	2
/Sin	3
/Cos	4
T+	5
Cos	6
D+	7
T-	8
+Ub	9
D-	10
config	11
nc	12



Industry 4.0

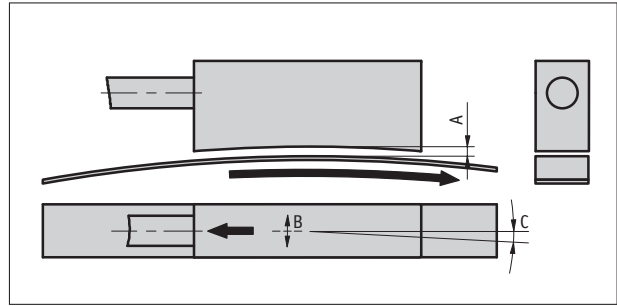
In most cases, data exchange with the magnetic encoders is limited to the exchange of process data. In addition to the process data, intelligent drives provide additional information that can be evaluated for condition monitoring up to predictive maintenance:

Process Data	Smart Value	Smart Function
Actual position	--	Plausibility monitoring

Hint for mounting

Please ensure correct alignment of both system components to each other during mounting of sensor and magnetic ring.

A, Sensor/ring reading distance (active measurement area)	0.1 ... 1.0 mm
B, Lateral offset	±1.5 mm
C, Misalignment	<±0.5°



Symbolic sensor representation

Order

Ordering information

One or more system components are required:

Magnetic ring MRAC506

www.siko-global.com

Ordering table

Feature	Ordering data	Specification	Additional information
Type of connection	EX	Plug outlet	
	E12X	Plug outlet with cable	
Resolution	12	12 bit	
	13	13 bit	
	14	14 bit	
	15	15 bit	
	16	16 bit	

Order key

MSAC506 - - H - - SSI - S

Scope of delivery: MSAC506, Quick Start Guide