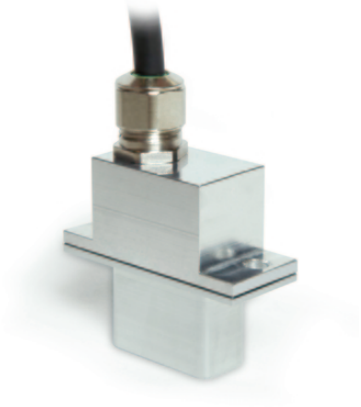
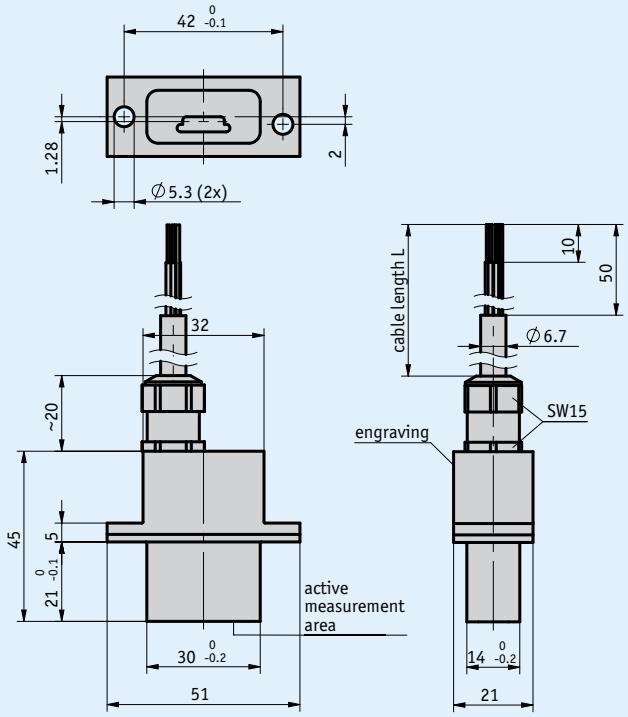
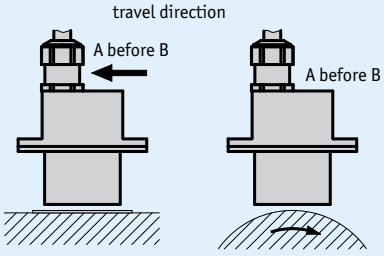
Profile

- High scaling factor ≤64
- Pole length 3.2 mm
- Speed-proportional signal output
- Reading distance ≤2 mm
- Works with MB320/1 magnetic tape, MR320 magnetic ring, MBR320 magnetic tape ring
- Option: ATEX version with TPS 13 ATEX 47828 001 X EC type-examination certificate







Mechanical data

Feature	Technical data	Additional information
Housing	aluminum	
Sensor/band reading distance	0.1 ... 2 mm	
Cable sheath	RADOX	6-wire, ø6.7 mm

Electrical data

Feature	Technical data	Additional information
Operating voltage	4.75 ... 30 V DC	
	4.75 ... 9 V DC	for ATEX application
Current consumption	≤40 mA	off-load
Output circuit	PP	
Output signals	A, /A, B, /B	
Real-time requirement	speed-proportional signal output	

System data

Feature	Technical data	Additional information
Pole length	3.2 mm	
Scaling factor	≤64	
Repeat accuracy	±1 increment(s)	
Circumferential speed	40 m/s	3.2 mm Pol, F_{in} ≤20 kHz
Travel speed	40 m/s ; 3.2 mm pol, F_{in} ≤20 kHz	3.2 mm Pol, Fin ≤20 kHz
Failure rate	395.2 year(s)	at 60 °C (MTBF)

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-40 ... 120 °C	
Storage temperature	-40 ... 120 °C	
Relative humidity	100 %	condensation admissible
EMC	IEC 61000-6-3(ed.2); am1, IEC 61000-6-2(ed.2.0), EN 61000-6-3:07 + A1:11, EN 61000-6-2:05	
Insulation strength	500 V AC	EN 60439-1
Protection category	IP67	EN 60529
Shock resistance	EN 61373 class 2	
Vibration resistance	EN 61373 class 2	

Pin assignment

Signal	Strand number
+UB	1
GND	2
A	3
/A	4
B	5
/B	6
	Shield on housing

ATEX option

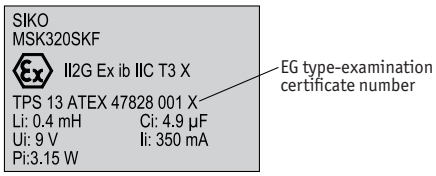
- **Pay attention to the following description when operating the MSK320SKF sensor with ATEX approval in the EEx-hazardous area**

  The maximum electrical and mechanical limiting values specified in the Technical data must not be exceeded. The following **characteristic safety values** apply to the MSK320SKF sensor:

- **inspection certificate**

  EC type-examination certificate TPS 13 ATEX 47828 001 X for Sensor MSK320SKF of 06-21-2016. The inspection certificatewill be provided on request.

The sensor must only be operated in the specified operating temperature range of -40 ... +120 °C



gravure (only with ATEX version)

- **Description of a safety circuit taking the example of (see next page)**

  The operating voltage is connected to the safety barrier. The safety barrier limits the current flowing into the EEX circuit to ≤350 mA and the voltage to ≤9 V.

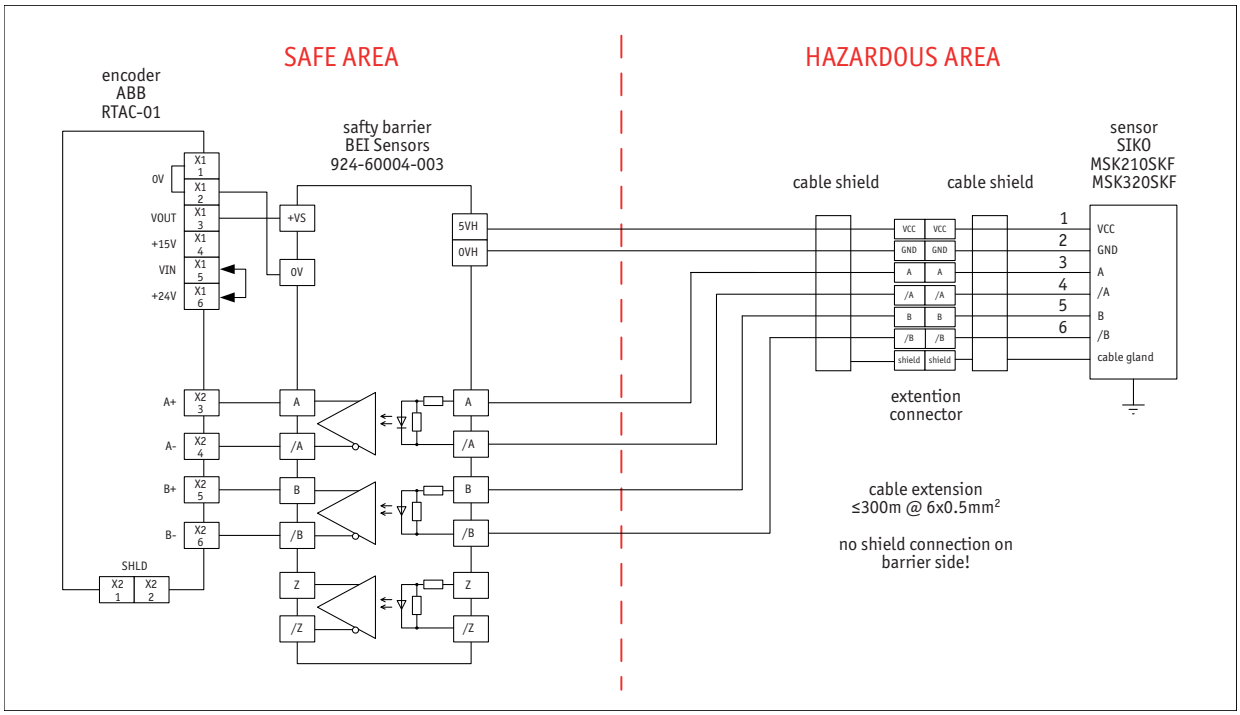
  The output signals are routed to the optical separation provided to this purpose. This ensures that no energy can enter the sensor through this path.

- **compilation of characteristic equipment values**

No.:	Name	Type	Manufacturer	U_o [V]	I_o [mA]	Ex group
1	Safety barrier	924-60004-003	BEI Sensors	8.5	345	IIC

- **circuit diagram**

  Possible protective circuitry of the MSK320SKF with a safety barrier is described below as an example. The safety barrier is not included in the scope of supply of the MSK320SKF.



Order

Ordering information

one or more system components are required:

Magnetic band MB320/1 www.siko-global.com

Ordering table

Feature	Ordering data		Specification	Additional information
Operating voltage	13	A	4.75 ... 30 V DC	
	15		4.75 ... 9 V DC	ATEX
Cable length	...	B	00.2 ... 01.0 m, in intervals of 0.1 m	
	...		01.0 ... 20 m, in intervals of 1 m	
Linear resolution/ radial scaling factor	0.1/8	C		
			others on request	

Order key

MSK320SKF - [ ] (A) - [A] - [E1] - [ ] (B) - [PP] - [I] - [0] - [ ] (C)

Scope of delivery: *MSK320SKF, Mounting instructions*