## Profile

- Easy mounting, field-wireable
- flexible measurement radiuses
- Measuring range <360°



magnetic band M = 1.0 mm
carrier strip T = 0.3 mm
adhesive strip K = 0.1 mm
max. thickness = 1.4 mm

20

length L
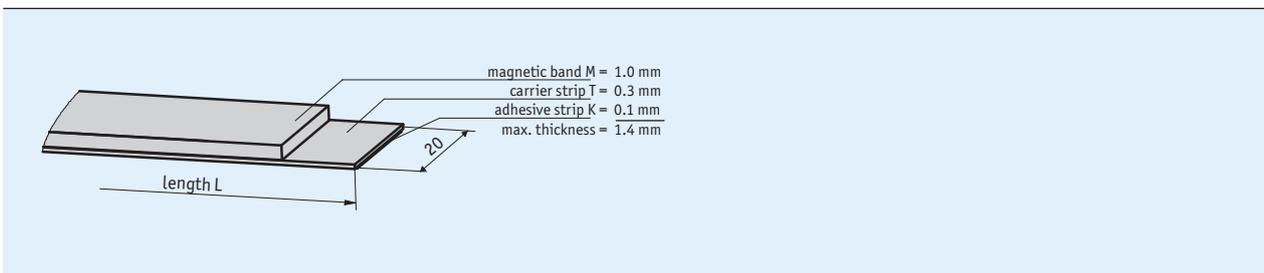
## Mechanical data

| Feature | Technical data | Additional information |
|---|---|---|
| Band width | 20 mm | |
| Band thickness | 1.4 mm | without cover strip |
| Mounting type | adhesive connection | |
| Accuracy class | ±50 µm | at $T_U$ = 20 °C |

## System data

| Feature | Technical data | Additional information |
|---|---|---|
| Measuring range | ≤10240 mm | |
| Circumferential speed | ≤10 m/s | see MSAC501 sensor |

## Ambient conditions

| Feature | Technical data | Additional information |
|---|---|---|
| Ambient temperature | -40 … 80 °C | |
| Storage temperature | -40 … 80 °C | |
| Expansion coefficient | $(11 \pm 1) \times 10^{-6}$/K | |
| Relative humidity | 100 % | condensation admissible |

## Hint for mounting
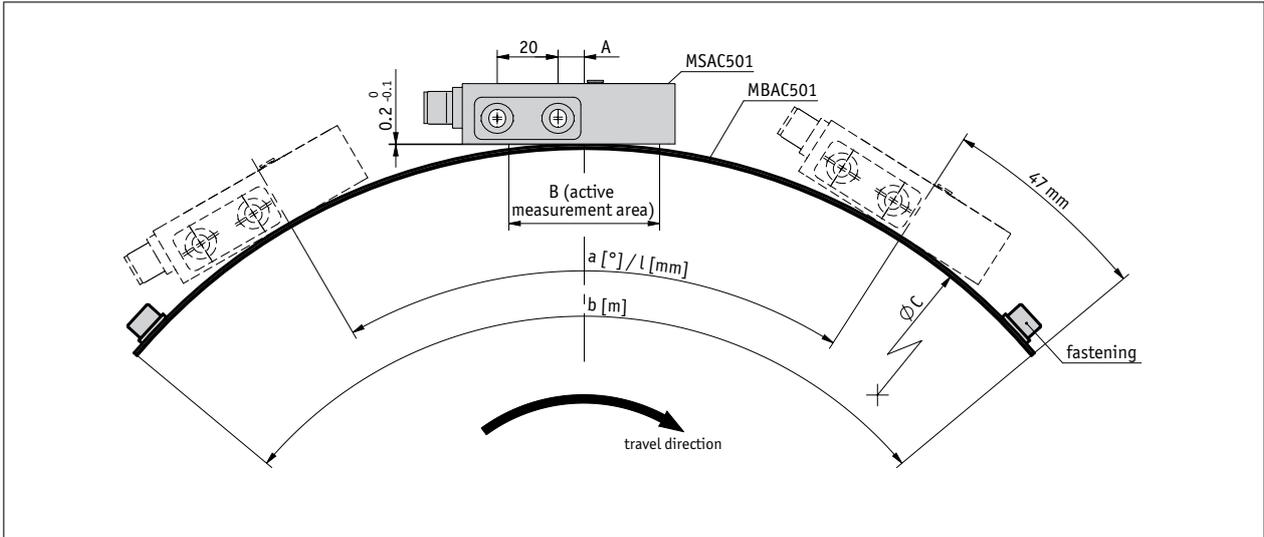


■ **Measurement table**

| Code size | Measurement A [mm] | Measurement B [mm] | Measurement øC [mm] | Measurement angle a [°] | Measurement length l [mm] |
|---|---|---|---|---|---|
| 7 Bit | 11.1 | 35 | ≥384 | <190 * | ≤640 |
| 8 Bit | 8.6 | 40 | ≥501 | <290 * | ≤1280 |
| 9 Bit | 6.1 | 45 | ≥634 | | ≤2560 |
| 10 Bit | 3.6 | 50 | ≥782 | | ≤5120 |
| 11 Bit | 1.1 | 55 | ≥946 | | ≤10240 |

* With the smallest measurement øC
For calculating the "required tape length" b refer to the order

■ **Diameter/measurement angle chart**
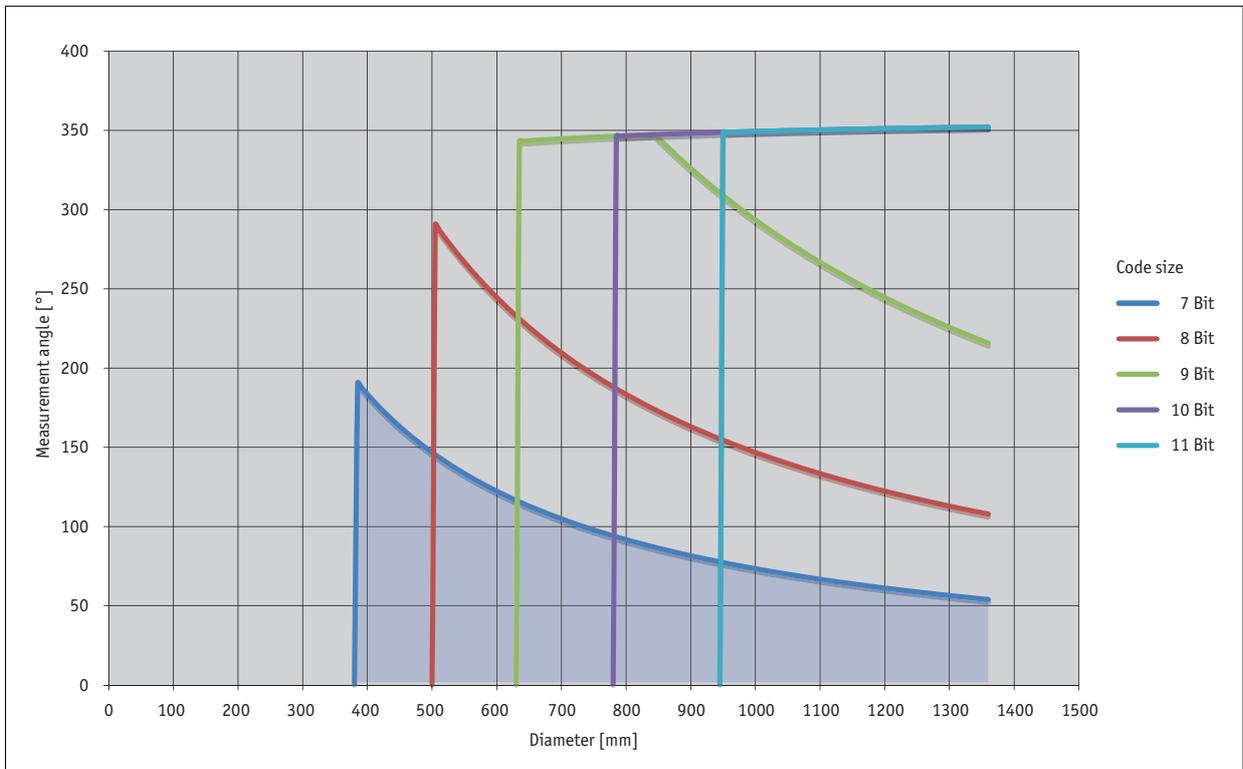
■ **Checking the maximum measuring length**

**Formula:**

$$l* = \frac{a \times øC \times \pi}{360°}$$

**Legend:**
l [mm] Measuring length
a [°] Measurement angle
øC [mm] Diameter

\* Calculated length l must be smaller than measurement length l in the table of dimensions.

## Order

■ **Ordering information**

One or more system components are required:
Magnetic sensor MSAC501                          www.siko-global.com

■ **Required tape length**

**Formula:**

$$b = \frac{a \times øC \times \pi}{360° \times 1000} + 2 \times 0.047 \text{ m}$$

**Legend:**
b [m] Band length
a [°] Measurement angle
øC [mm] Diameter

■ **Ordering table**

| Feature | Ordering data | | Specification | Additional information |
|---|---|---|---|---|
| Length | ... | A | 00.50 ... 75.00 in m | |
| Code size | 7 | B | 7 bits | |
| | 8 | | 8 bits | |
| | 9 | | 9 bits | |
| | 10 | | 10 bits | |
| | 11 | | 11 bits | |
| Adhesive carrier tape | TM | C | with | |
| | T0 | | without | |

■ **Order key**

MBAC501 - [ A ] - [ B ] - [ C ]

*Scope of delivery:* MBAC501