Compact-Line | **Measuring wheel system MWE11** | **With spring bracket, contact force max. 10 N**



With incremental encoder Sendix 2400.

Measuring wheel systems from Kübler are the ideal solution for reliable speed measurement, position detection and length measurement in applications with linear movements. These are recorded rotationally via the measuring wheel with attached encoder directly on the surface of the material to be measured and converted into linear data.

The compact measuring wheel system MWE11 with the smallest size can be integrated very flexibly, even in the tightest installation spaces.

RoHS

Push-Pull
HTL

Features

- **Easy handling**
  Measuring wheel, sensor and spring bracket are pre-assembled and therefore easy to install: screw on - connect - done.
- **Compact design**
  Dimensions of the complete unit only 74 x 50 x 52 mm.
- **Measuring wheels in 2 variants**
  Circumference 100 mm - measuring wheel coating available with diamond knurl or rubber surface.

Order code with incremental encoder

05.2400	.	0040	.	1000	.	50	XX ❶
Type							

❶ *Measuring wheel, circumference / coating*
45 = 100 mm / diamond knurl (aluminum)
49 = 100 mm / Rubber, Shore hardness 60
(other measuring wheels on request)

Mounted encoder

2400	incremental	to the datasheet >

Output circuit / supply voltage encoder
push-pull (with inverted signal) / 8 ... 30 V DC

Type of connection
radial cable, 2 m PVC

Pulse rate
1000 ppr
(other options on request)

Calculation of the linear resolution

	Measuring step (Dinstance/pulse)			Resolution (pulses/Dinstance)		
Calculation	$\frac{\text{Distance}}{\text{ppr}}$	=	$\frac{\text{Measuring wheel circumference}}{\text{Pulse number encoder}}$	$\frac{\text{ppr}}{\text{Distance}}$	=	$\frac{\text{Pulse number encoder}}{\text{Measuring wheel circumference}}$
Example Measuring wheel circumference = 100 mm Pulse number encoder = 1000 ppr	$\frac{100\text{ mm}}{1000\text{ ppr}}$	=	0.1 mm / puls	$\frac{1000\text{ ppr}}{100\text{ mm}}$	=	10 pulses / mm

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Single components

Measuring wheels

Option ❶	circumference / coating	Order no.
45	100 mm / diamond knurl (aluminum)	**8.0000.3113.0006**
49	100 mm / Rubber, Shore hardness 60	**8.0000.3123.0006**

(other measuring wheels on request)

Details s. datasheet >

Evaluation

Preset counter Codix 924

Order no. **6.924.01XX.XXX**

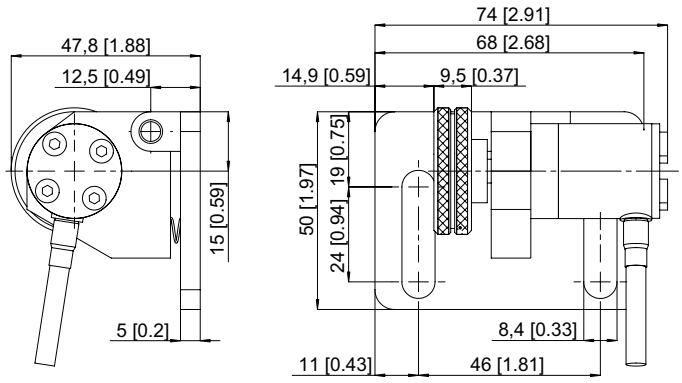
Multifunction device:
- Tachometer with limit values
- Position indicators with limit values
- Time preset counter



Further accessories can be found at: kuebler.com/accessories
Cables and connectors can be found at: kuebler.com/connection-technology

Dimensions

Dimensions in mm [inch]



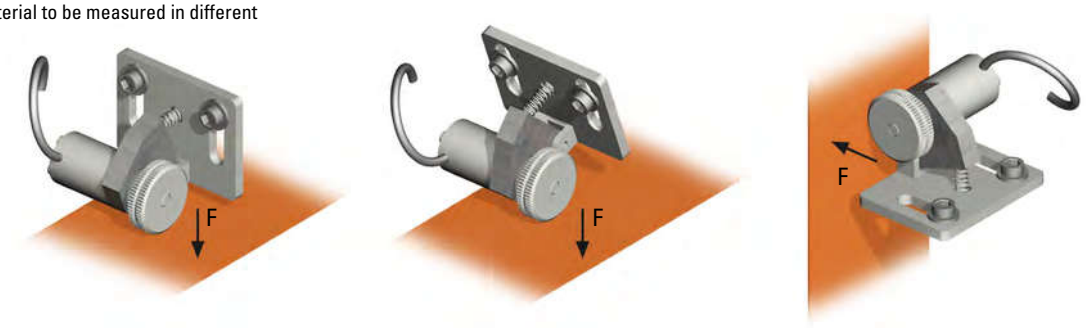
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Technology in detail

Various mounting options

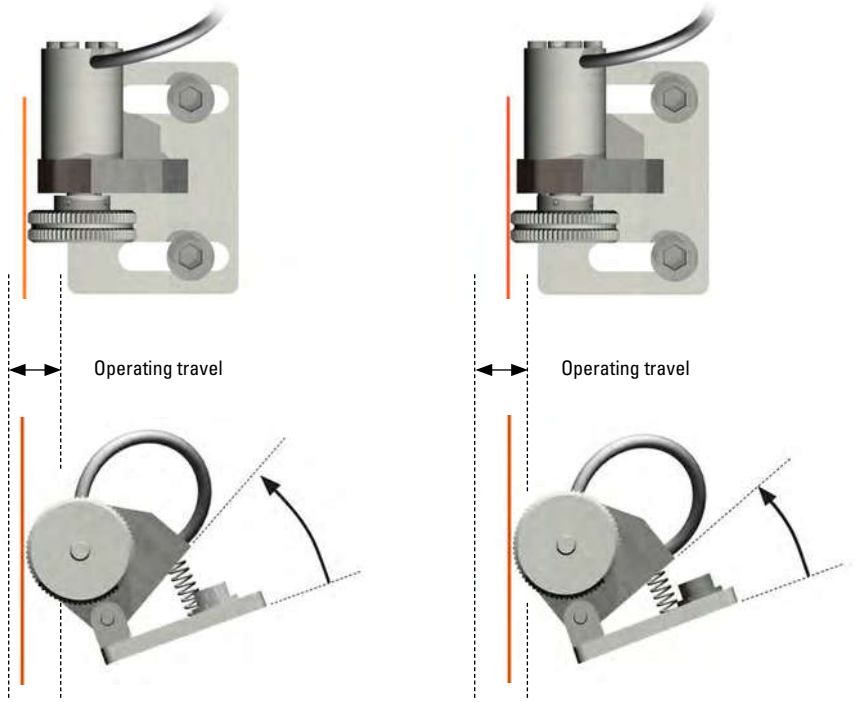
The measuring wheel system can be placed on the material to be measured in different ways.



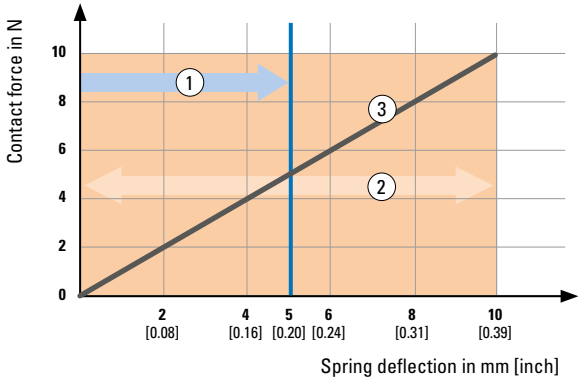
Setting the preload

The distance between the MWE11 measuring wheel system and the material to be measured can be adjusted via 2 slotted holes.

This simultaneously sets the desired preload of the spring.



Contact force of the measuring wheel on the material to be measured



1 Preload, recommended : 5 N

2 Operating travel, max. : 10 mm

3 Contact force in relation to spring deflection

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