System components Compact-Line | **Spring arm MWE20** | **Contact force max. 20 N**



For incremental or absolute encoders with clamping flange ø 36 mm or ø 40 mm.

The MWE20 spring arm in combination with an encoder and a measuring wheel as measuring wheel system MWE21 is the ideal solution for reliable speed measurement, position detection and length measurement in applications with linear movements.

This compact measuring wheel system with adjustable preload can be integrated very flexibly even in the tightest installation spaces.

To the measuring wheel system MWE21 >

Features

- **Contact force up to max. 20 N**
  With adjustable preload and mechanical spring deflection limitation for a long service life. The integrated spring ensures a working range of the measuring wheel of up to 16 mm vertical to the measuring surface to compensate for tolerances.
- **Suitable measuring wheels**
  Circumferences 200 mm or 6“ - measuring wheel coating available with O-ring, smooth plastic or diamond knurl surface.
- **Compact design**
  Also suitable for the smallest installation space.
- **Flexible use**
  Multiple mounting options - horizontal, vertical or overhead - for quick and easy installation. Encoders can be mounted on both sides of the spring arm in 30° steps.

Order code

8.MWE20	.	X	X	1	.	00	.	0000	.	0000
Type		❶	❷							

❶ *For encoder with clamping flange*
1 = ø 40 mm – Kübler Sendix encoder incremental KIS40, 3610
2 = ø 36 mm – Kübler Sendix encoder absolute F36xx, M36xx

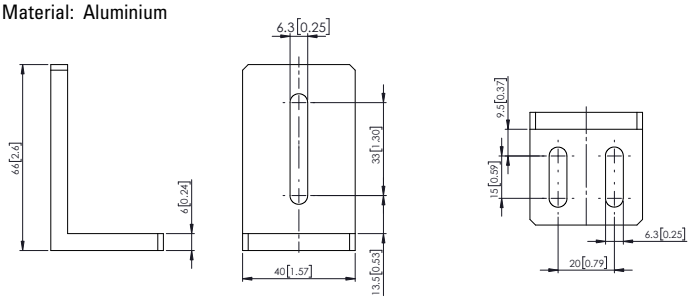
❷ *Mounting bracket*
1 = without mounting bracket
2 = with mounting bracket

Scope of delivery
- Spring arm
- 3 screws for encoder mounting

Accessories

Accessories		Order no.
Mounting bracket	Material: Aluminium	**8.0000.7000.0065**





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Technology in detail (operating principle of the MWE20 spring arm in the MWE21 measuring wheel system)

Mounting options encoder on spring arm

The encoder is attached to the spring arm with 3 screws.



The fastening points are designed in such a way that mounting on both sides of the spring arm is possible.



Mounting left (delivery state)



Mounting right

For a flexible outlet direction of the cable or connector, the encoder can additionally be mounted in 30° steps.



0° (delivery state)



30°



60°



90°

Various mounting options

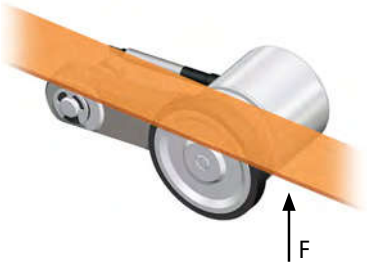
downwards



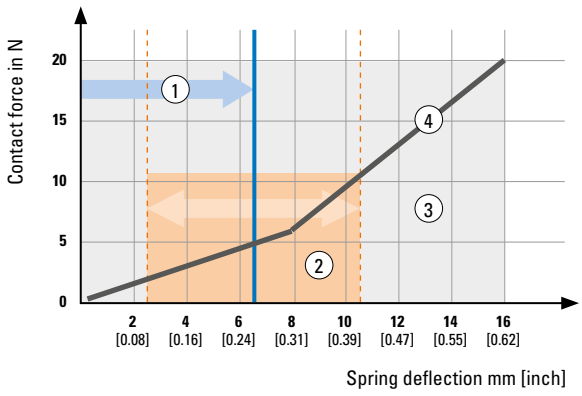
sidewards



upwards (overhead)



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



1	Preload, example:	5 N (approx. 6,5 mm defection)
2	Operating travel, recommended:	± 4 mm (from the preload set)
3	Spring deflection, max.:	16 mm
4	Contact force in relation to spring deflection (Functional principle based on 2 integrated springs)	

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System components Compact-Line | **Spring arm MWE20** | **Contact force max. 20 N**

Technical data

Mechanical characteristics

Materials	spring spring arm	spring steel aluminum
Weight		37 g
Contact force, max.		20 N
Spring deflection, max.		16 mm
Preload, recommended		5 N (approx. 6,5 mm spring deflection)
Operating travel, recommended (continuous)		±4 mm [1] (from the recommended preload)
Spring operating life		2.0 Mio. cycles [2]

Approvals

UL compliant acc. to	File no. E224618
CE compliant acc. to	RoHS guideline 2011/65/EU
UKCA compliant acc. to	RoHS Regulations S.I. 2012/3032

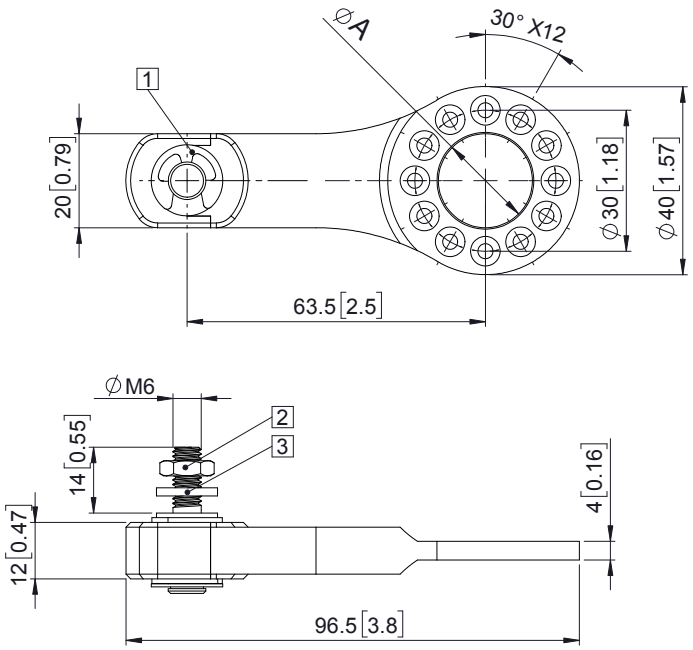
Dimensions

Dimensions in mm [inch]

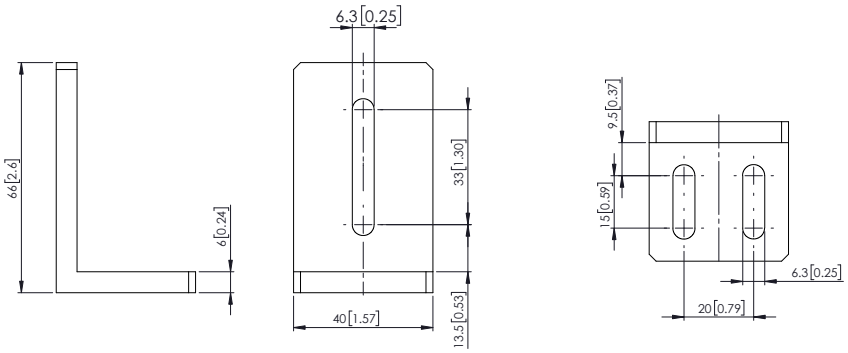
Spring arm

1 External clamping ring type E
2 Hexagon nut M6
3 Toothed washer

Order code ❶	for encoder	A mm [inch]
1	incremental KIS40, 3610	20 [0.79]
2	absolute F36xx, M36xx	24 [0.94]



Mountig bracket



1) Operating deflection is measured after preload applied and with/for continuous operations.
2) Life of spring is measured with operating deflection at 1 Hz.

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