



## Wire draw encoders EcoLine

BCG05-K1KM01PP



**Model Name** > BCG05-K1KM01PP  
**Part No.** > 6039745



*Illustration may differ*

#### At a glance

- Measuring lengths of 1.25 m, 3 m, 5 m, and 10 m.
- Very small dimension (55 ... 190 mm)
- Modular system: encoder type, measuring length, and interface can be selected
- Programmable encoders: Resolution, interface and measuring range
- Light yet shock-proof and temperature-resistant plastic housing (Noryl)
- Space-saving and cost-effective design
- Analog interface with pushbutton teach at the encoder

#### Your benefits

- Easy to install thanks to pushbutton teach
- Suitable for tight installation spaces as a result of slim, compact design
- High precision due to the elimination of the coupling between the encoder and mechanism
- Wide range of applications thanks to the numerous encoders, interfaces, and measuring lengths
- The absolute analog output allows for the use of a cost-effective interface card
- Options for customization, such as programmability, reduce storage and downtime costs
- Greater vibration resistance thanks to the integration of the spring in the measuring drum



#### Performance

|                  |                             |
|------------------|-----------------------------|
| Measuring range: | 0 m ... 1.25 m              |
| Repeatability:   | $\pm 0.005\%$ <sup>1)</sup> |
| Linearity:       | $\pm 0.01\%$ <sup>2)</sup>  |
| Hysteresis:      | $\pm 0.1\%$ <sup>3)</sup>   |
| Resolution:      | 0.04 mm                     |

<sup>1) 2) 3)</sup> Value refers to wire draw mechanism

#### Mechanical data

|                                        |                                     |
|----------------------------------------|-------------------------------------|
| Mass (including encoder):              | 200 g                               |
| Mass (mechanics):                      | 80 g                                |
| Measuring wire diameter:               | 0.45 mm                             |
| Housing material, wire draw mechanism: | Plastic, Noryl                      |
| Drum extent:                           | 150 mm                              |
| Spring return force:                   | Ca. 1 N ... ca. 1.4 N <sup>1)</sup> |

|                                   |                     |
|-----------------------------------|---------------------|
| Life of wire draw mechanism:      | 1 million cycles    |
| Actual length of cable extension: | 1.45 m              |
| Wire acceleration:                | 10 m/s <sup>2</sup> |
| Operating speed:                  | 4 m/s               |
| Mounted encoder:                  | ACM36               |
| Mounted mechanic:                 | MRA-G055-101D4      |
| Part number mechanic:             | 5324019             |
| Part number encoder:              | 6039751             |

<sup>1)</sup> These values were measured at an ambient temperature of 25 °C. There may be variations at other temperatures.

## Electrical data

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|                      |                      |
|----------------------|----------------------|
| Initialization time: | < 2 ms <sup>1)</sup> |
|----------------------|----------------------|

<sup>1)</sup> Valid positional data can be read once this time has elapsed.

## Interfaces

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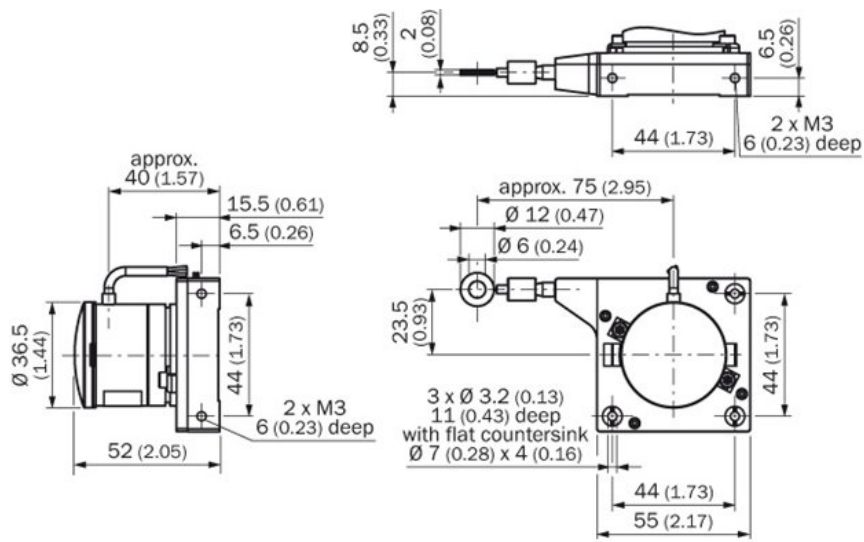
|                              |                              |
|------------------------------|------------------------------|
| Electrical interface:        | 4 mA ... 20 mA, Analog       |
| Connection type:             | Cable, 3-wire, radial, 1.5 m |
| Clock frequency:             | 32 kHz                       |
| SET (electronic adjustment): | Über Programmierfolie        |

## Ambient data

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|                            |                                                        |
|----------------------------|--------------------------------------------------------|
| EMC:                       | (according to EN 61000-6-2 and EN 61000-6-3)           |
| Enclosure rating encoder:  | IP 65                                                  |
| Enclosure rating mechanic: | IP 50                                                  |
| Resistance to shocks:      | 50 g, 6 ms (according to EN 60068-2-27)                |
| Resistance to vibration:   | 4 g, Sinus 5 Hz ... 100 Hz (according to EN 60068-2-6) |
| Working temperature range: | -30 °C ... 70 °C                                       |

Dimensional drawing



#### **Australia**

Phone +61 3 9457 0600  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

#### **Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

#### **Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

#### **Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

#### **Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

#### **China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

#### **Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

#### **Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

#### **España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

#### **France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

#### **Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

#### **India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

#### **Israel**

Phone +972-4-6801000  
E-Mail info@sick-sensors.com

#### **Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

#### **Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

#### **Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

#### **Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

#### **Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

#### **Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

#### **Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

#### **România**

Phone +40 356 171 120  
E-Mail office@sick.ro

#### **Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

#### **Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

#### **Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

#### **Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

#### **South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

#### **South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

#### **Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

#### **Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

#### **Taiwan**

Phone +886-2-2375-6288  
E-Mail sales@sick.com.tw

#### **Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

#### **United Arab Emirates**

Phone +971 (0) 4 8865 878  
E-Mail info@sick.ae

#### **USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)