



Wire draw encoders EcoLine

PFG08-E1CM0371



Model Name > **PFG08-E1CM0371**
Part No. > **1060981**



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 resolution, output voltage, and measuring range
- Light yet shock-proof and temperature-resistant plastic housing (Noryl)
- Space-saving and cost-effective design

Your benefits

- Easy, cost-efficient integration thanks to incremental interface
- Suitable for tight installation spaces as a result of its slim, compact design
- High precision resulting from the elimination of a coupling between the encoder and mechanism
- Wide range of applications thanks to numerous encoders, interfaces, and measuring lengths
- 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 ... 3 m
Repeatability:	$\pm 0.005\%$ ¹⁾
Linearity:	$\pm 0.01\%$ ²⁾
Hysteresis:	$\pm 0.1\%$ ³⁾
Resolution:	0.014 mm

^{1) 2) 3)} Value refers to wire draw mechanism

Mechanical data

Mass (including encoder):	550 g
Mass (mechanics):	250 g
Measuring wire diameter:	0.55 mm
Housing material, wire draw mechanism:	Plastic, Noryl
Drum extent:	230 mm
Spring return force:	5 N ... 6.3 N ¹⁾
Life of wire draw mechanism:	1 million cycles
Actual length of cable extension:	3.2 m

Wire acceleration:	10 m/s ²
Operating speed:	4 m/s
Mounted encoder:	DFS60
Mounted mechanic:	MRA-G080-103D3
Part number mechanic:	5322778
Part number encoder:	1037616

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

Electrical data

Maximum output frequency:	600 kHz
Reference signal, position:	Electronically, gated with A and B
Reference signal, number:	1, electronically, gated with A and B
Maximum load current:	30 mA
Initialization time::	≤ 32 ms, with mechanical zero pulse width ≤ 30 ms ^{1) 2)}
MTTFd: mean time to dangerous failure::	300 a ^{3) 4)}

^{1) 2)} Valid positional data can be read once this time has elapsed. ³⁾ This product is a standard product and does not constitute a safety component as defined in the Machinery Directive.

Calculation based on nominal load of components, average ambient

temperature 40°C, frequency of use 8760 h/a. All

electronic failures are considered hazardous. For more information, see document no. 8015532. ⁴⁾ The value applies to the mounted encoder

Interfaces

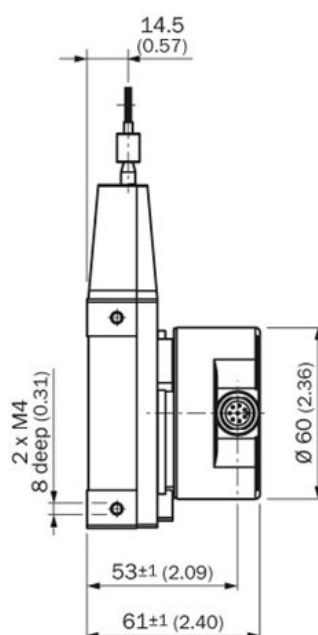
Electrical interface:	HTL/Push pull
Connection type:	Connector M12, 8-pin, radial

Ambient data

EMC:	(according to EN 61000-6-2 and EN 61000-6-3)
Enclosure rating encoder:	IP 67
Enclosure rating mechanic:	IP 50
Resistance to shocks:	60 g, 6 ms (according to EN 60068-2-27)
Resistance to vibration:	20 g, 10 Hz ... 2,000 Hz (according to EN 60068-2-6)
Working temperature range:	-30 °C ... 70 °C
Relative humidity/Condensation:	90 % (condensation of the optical scanning not permitted)

Technical drawing of the front view of a mechanical part. The drawing shows a square plate with a central circular hole and a slanted top edge. Dimensions are given in millimeters (mm) and inches (in). Key dimensions include:

- Overall width: 80 (3.15)
- Overall height: 108 (4.25)
- Central hole diameter: 36 (1.42)
- Mounting hole diameters: Ø 4.2 (0.17), Ø 9 (0.35), Ø 12 (0.47), Ø 6 (0.24)
- Slanted top edge dimensions: 36 (1.42), 67 (2.64)
- Central hole diameter: 67 (2.64)
- Mounting hole diameter: 2 x M4 8 deep (0.31)



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