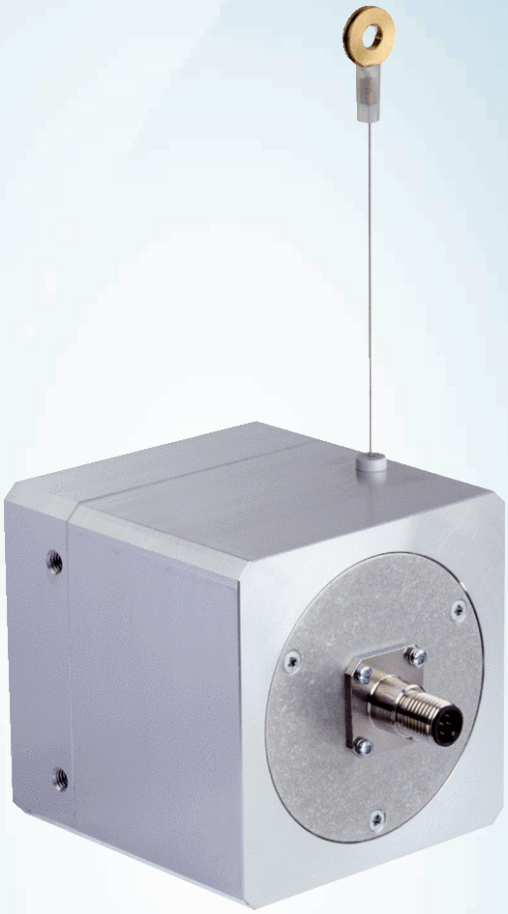
Online data sheet



XKS09-HTBM0527

Compact

WIRE DRAW ENCODERS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	Part no.
XKS09-HTBM0527	1035437

Other models and accessories → www.sick.com/Compact

Detailed technical data

Performance

Measurement range	0 m ... 5 m
Length of period	1.1953 mm
Linearity	≤ ± 0.7 mm
Measuring step	≥ 0.295 µm
Non-linearity	± 0.1 mm
Traversing speed	3.5 m/s
Repeat accuracy, typ.	≤ 0.15°

Interfaces

Encoder	Absolute encoders
Electrical interface	HIPERFACE®
Connection type	Male connector M12, 8-pin, radial
Interface signals	Process data channel SIN, REFSIN, COS, REFCOS: analog, differential Parameter channel RS-485: digital
Sine/cosine periods per revolution	128
Type of code for the absolute value	Binary

Electrical data

Operating current	60 mA (without load)
Output frequency for sine/cosine signals	0 kHz ... 65 kHz
Available memory area	1,792 Byte
E^2PROM	2048 Eeprom
Supply voltage	7 V ... 12 V

[1] 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.

Code sequence	Rising at wire pull-out
MTTFd: mean time to dangerous failure	250 years (EN ISO 13849) [1]

[1] 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.

Mechanical data

Weight (mechanics)	1.5 kg
Measuring wire material	Highly flexible stranded steel (PA 12 sheathed)
Housing material	Aluminum
Spring return force	4 N ... 6 N [1]
Life of wire draw mechanism	Typ. 800,000 cycles [2] [3]
Measuring wire diameter	0.6 mm
Wire acceleration	≤ 20 m/s²

[1] These values were measred at an ambient temperature of 25 °C. There may be variations at other temperatures.

[2] A cycle consists of the wire being pulled out and drawn in.

[3] The service life depends on the type of load. This is influenced by environmental conditions, the installation location, the measuring range in use, the traversing speed, and acceleration.

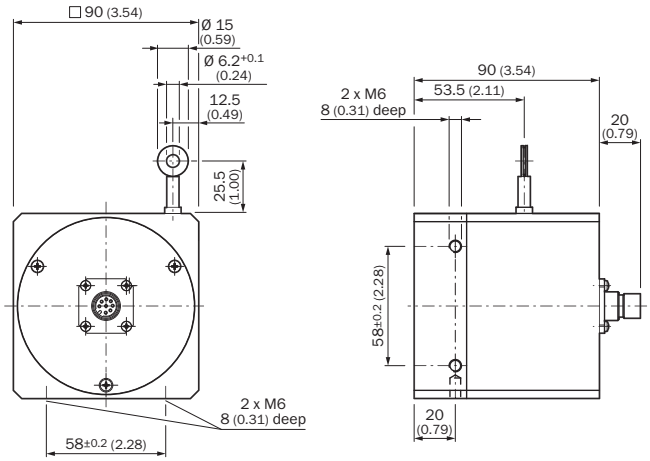
Ambient data

EMC	According to EN 61000-6-2 and EN 61000-6-3
Enclosure rating encoder	IP52, Note required mounting position (according to IEC 60529)
Resistance to shocks	20 g, 6 ms (according to EN 60068-2-27)
Frequency range of resistance to vibrations	10 g, 10 Hz ... 2,000 Hz (according to EN 60068-2-6)
Working temperature range (encoder)	–10 °C ... +70 °C
Storage temperature range	–20 °C ... +80 °C
Relative humidity/condensation	90 % (Condensation not permitted)

Classifications

ECl@ss 5.0	27270590
ECl@ss 5.1.4	27270590
ECl@ss 6.0	27270590
ECl@ss 6.2	27270590
ECl@ss 7.0	27270590
ECl@ss 8.0	27270590
ECl@ss 8.1	27270590
ECl@ss 9.0	27270590
ETIM 5.0	EC001486
ETIM 6.0	EC001486
UNSPSC 16.0901	41112113

Dimensional drawing (Dimensions in mm (inch))



Recommended accessories

Other models and accessories ➜ www.sick.com/Compact

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: cable Head B: Flying leads Cable: SSI, PUR, halogen-free, shielded	LTG-2308-MWENC	6027529
	Head A: cable Head B: Flying leads Cable: SSI, TTL, HTL, PUR, halogen-free, shielded	LTG-2612-MW	6028516
	Head A: female connector, M12, 8-pin, straight Head B: - Cable: shielded	DOS-1208-GA	6028369

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com