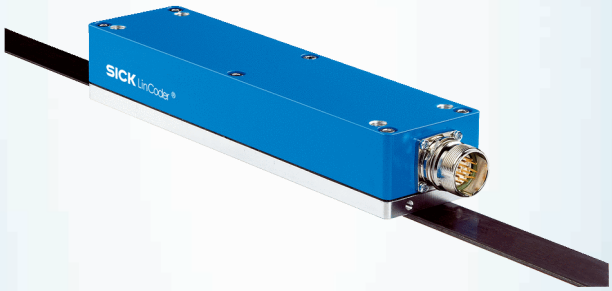
Online data sheet



L230-P580C2S00000

Lincoder L230

PRODUCT PORTFOLIO

SICK
Sensor Intelligence.

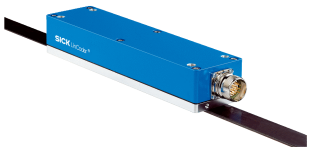


Illustration may differ

Ordering information

Type	Part no.
L230-P580C2S00000	1033532

In accordance with Article 2 (4), this product does not fall within the scope of RoHS directive 2011/65/EU and is also not designed for use in products which fall within the scope of this directive. You can find additional information in the product information.

Other models and accessories ➜ www.sick.com/Lincoder_L230

Product description

The L230 Lincoder measuring system consists of magnetic tape and a non-contact read head. The magnetic tape provides the scale for measuring systems up to 40 m. The absolute information is magnetized in a sequential 12-bit code onto the tape. To achieve the highest possible resolution and accuracy, an incremental track is also magnetized on the magnetic tape, i.e., north and south pole are always alternately present. The magnetic tape is laminated on a ferromagnetic strip (steel strip), which serves both as a magnetic inference and as a mounting aid to stabilize the tape. This enables the magnetic strip to be adhered directly onto a ferromagnetic pillar without any restrictions and without any effect on its magnetic properties. These encoders are ideal for applications in which high travel speeds and simple mounting are essential.

At a glance

- Non-contact length measurement
- Wear-, maintenance-free
- Determination of absolute position
- Measuring lengths of up to 40 m possible
- High level of accuracy and high resolution
- High travel speeds of up to 6 m/s

Your benefits

- After installation, the system is immediately available and completely maintenance-free, which leads to time and cost savings.
- High level of accuracy and high resolution enable very precise measurements
- Suitable for high travel speeds, which increases productivity

CE

Fields of application

- Position determination for high-bay warehouses, gantry robots, presses, palletizing machines, linear motors

Detailed technical data

Features

System part	Read head
Measuring length	≤ 40 mm
Measuring range	0 m ... 40 m
Magnetic strip length	Measurement length + 130 mm [1)]
Resolution	156.25 µm
Electrical interface	7 V ... 12 V, HIPERFACE®
Connection type	Male connector, M23, 12-pin

[1)] Technical neccessary constant.

Performance

Reproducibility	± 10 µm
Traversing speed	6.6 m/s [1)]
Measurement accuracy	Typ. ± 0.3 mm/ m at 20 °C
System part	Read head
Measuring length	≤ 40 mm
Measurement range	0 m ... 40 m
Magnetic strip length	Measurement length + 130 mm [2)]
Resolution	156.25 µm
Electrical interface	7 V ... 12 V, HIPERFACE®
Connection type	Male connector, M23, 12-pin

[1)] If the max. traversing speed is exceeded or the read head cannot detect a measuring element, the corresponding error message is output: FF FF FE hex.
[2)] Technical neccessary constant.

Interfaces

Electrical interface	7 V ... 12 V, HIPERFACE®
Position forming time	+ 750 µs

Electrical data

Initialization time	2,500 s
Supply voltage	7 V ... 12 V
Power consumption	4.5 W

Mechanical data

Weight	0.685 kg
Coefficient of thermal expansion	16 µm/°C/m
Material	AlMgSiPbF28

Ambient data

Enclosure rating	IP65 [1]
Working temperature range	0 °C ... +70 °C
Storage temperature range	–40 °C ... +100 °C
Resistance to shocks	30 g (DIN EN 61000-2-27)
Resistance to vibration	10 g (20 Hz ... 250 Hz) (DIN EN 61000-2-6)

[1] With mating connector fitted.

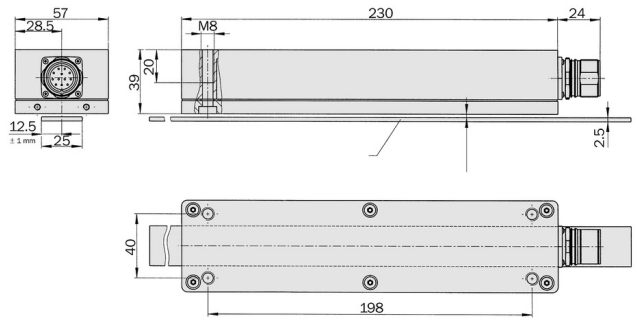
Classifications

ECl@ss 5.0	27270705
ECl@ss 5.1.4	27270705
ECl@ss 6.0	27270705
ECl@ss 6.2	27270705
ECl@ss 7.0	27270705
ECl@ss 8.0	27270705
ECl@ss 8.1	27270705
ECl@ss 9.0	27270705
ETIM 5.0	EC002544
ETIM 6.0	EC002544
UNSPSC 16.0901	41111613

Electronics

Initialization time	2,500 s
Position forming time	+ 750 µs
Supply voltage	7 V ... 12 V
Power consumption	4.5 W

Dimensional drawing (Dimensions in mm (inch))



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