

VarioLine

SICK
Sensor Intelligence.

Advantages



VarioLine – the flexible all-rounder

Whether for indoor or outdoor applications – the VarioLine wire draw encoder with its rugged and variable design delivers reliable measurement data. VarioLine offers a high precision and measurement quality as well as a long service life of the mechanics. The VarioLine is especially slim thanks to the single chamber design, which makes the wire draw encoder ideally suited for installation situations where space is limited.



Fits. Regardless of how you rotate the VarioLine: The optional, universal deflection roller can be rotated by 360°, thereby making device integration easy.



Install fast, profit for a long time: The wire rope hoist is especially durable and the mechanics are well protected against contamination by optional dirt scrapers.



Flexible design: VarioLine allows easy mounting of the encoder on the front or rear of the mechanics.



When it comes to ruggedness and precision, the VarioLine is in a class of its own in indoor and outdoor applications.



Can be adapted to different interface environments

Thanks to its modular concept, the wire draw encoder is available with many different communication interfaces: IO-Link, CANopen, PROFINET, SSI, analog communication interfaces etc. This makes the VarioLine effortless to integrate into almost any control environment. It also enables the individual encoder functions to be utilized, for example diagnostic functions, parameterization via SOPAS, or the use of Smart Tasks to directly determine speeds or the measuring distance covered.



The VarioLine continuously delivers diagnostic data. This provides the basis for safe process monitoring and increases the plant availability. Any faults that arise can be detected early.



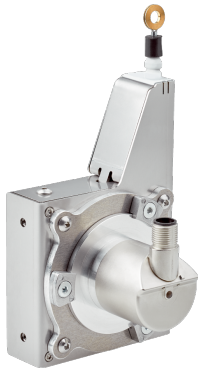
Ensuring future security: Thanks to the decentralized intelligence of IO-Link, diagnostic data can be saved, Smart Tasks such as length measurements can be executed and production processes with Industry 4.0 concepts can be designed with high efficiency.



Detecting faults early on: Extensive diagnostic functions are available with the PROFINET standard which improve the reliability of the measurement process and therefore increase machine availability and productivity.



Thanks to its modular construction and intelligent functions, the VarioLine can be precisely adapted to the specific system environment.



Technical data overview

Measuring range	0 m ... 3 m
Resolution	0.0009 mm ... 0.06 mm (depending on type)
Communication interface	IO-Link / IO-Link V1.1 / COM3 (230,4 kBaud) CANopen SSI SAE J1939 PROFINET EtherCAT® / CoE (CAN over EtherCAT®) EtherNet/IP™ Analog / Current / 4...20 mA Analog / Voltage / 0...10 V Incremental / TTL / RS-422 Incremental / HTL / Push pull Incremental / TTL / HTL

Product description

The compact VarioLine wire draw encoder is the ideal solution for measuring distances of up to 3 m. Its rugged stainless-steel housing, combined with a high retraction force, ensures a long service life for the device – even under harsh conditions. The VarioLine is also compatible with all other SICK encoders thanks to its extensive range of accessories and numerous interfaces. The wire draw encoder can be easily integrated into many installation spaces thanks to the deflection rollers. Smart tasks, diagnostic functions and numerous programming options make the wire draw encoder very flexible.

At a glance

- Measuring range: up to 3 m
- Compact housing
- Modular measuring system with a wide selection of interfaces
- Rugged wire with 0.81 mm diameter; optional dirt scraper
- High retraction force
- Accessories for individual measuring wire guide

Your benefits

- Easy and space-saving integration thanks to compact housing and deflection rollers
- High durability and precision thanks to very rugged wire and reliable mechanics
- High flexibility: Large selection of electrical interfaces and extensive accessories allow for compatibility with all SICK encoders
- Time savings due to quick commissioning
- Long period of operation, as diagnostic options and intelligent sensor functions are available via Smart Tasks

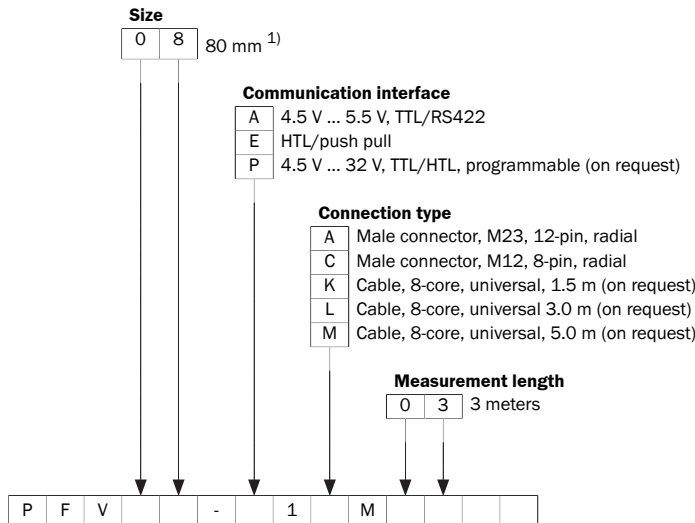
Fields of application

- Positioning of automated storage and retrieval systems
- Positioning of grippers and trolleys on cranes
- AGVs
- Lifting platforms
- Press

Type code

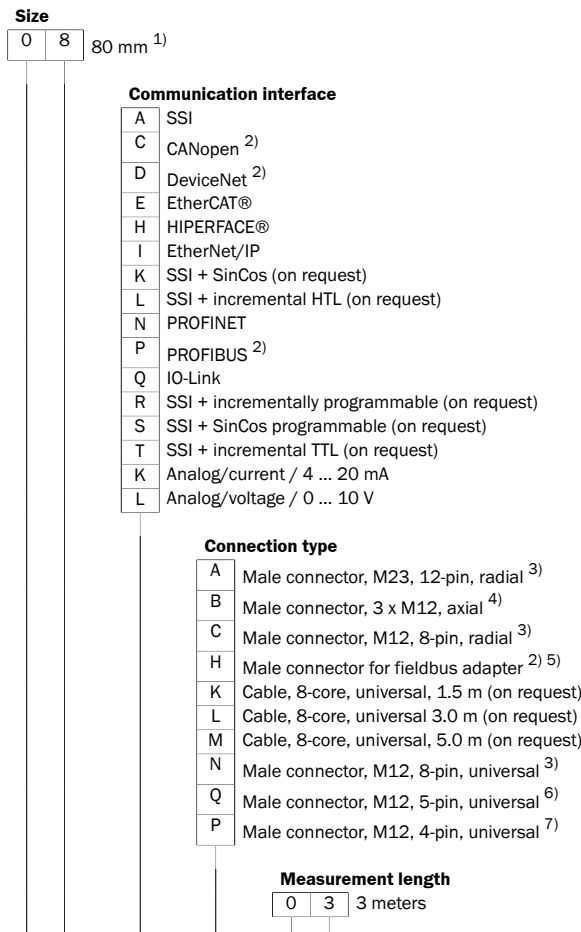
Other models and accessories → www.sick.com/VarioLine

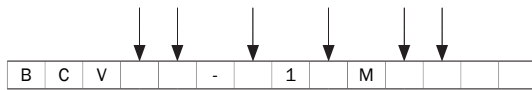
Incremental



¹⁾ Only in combination with measuring length 03.

Absolute





- 1) Only in combination with measuring length 03.
- 2) Field bus adapter for CANopen, DeviceNet, and PROFIBUS with radial outlet - please order separately.
- 3) Only in combination with communication interface A.
- 4) Only in combination with the communication interfaces E, I, N and P.
- 5) Only in combination with the communication interfaces C, D and P.
- 6) Only in combination with communication interface C.
- 7) Only in combination with communication interface Q.

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