



## DFV60

High-resolution, programmable measuring wheel encoder with two measuring wheels

**SICK**  
Sensor Intelligence.



### Technical data overview

<b>Resolution in pulses/mm</b>	218.45 / 3.41 (depending on type)
<b>Spring deflection spring arm</b>	± 10 mm
<b>Measuring wheel circumference</b>	300 mm
<b>Measuring wheel surface</b>	O-ring NBR70
<b>Programmable</b>	✓ / - (depending on type)
<b>Communication interface</b>	Incremental
<b>Communication Interface detail</b>	TTL / HTL (depending on type)
<b>Connection type</b>	Male connector, M12 Cable
<b>Supply voltage</b>	4.5 V ... 32 V (depending on type)
<b>Operating temperature range</b>	-20 °C ... +100 °C

### Product description

The DFV60 high-resolution measuring wheel encoder is an extremely robust solution for determining position and speed directly on the conveyor belt, even in applications where the measuring surface is subject to high levels of vibrations. The DFV60 consists of an incremental encoder with a mounting arm and two measuring wheels. The spring arm is available as an accessory. Extensive programmability of output signal, zero pulse and lines counts from 1 to 65,536 enable customer-specific adaptations.

### At a glance

- Universal use, rotatable spring arm
- Wheel circumference 300 mm with O-ring made from NBR70
- Mounting arm and measuring wheels made from aluminum
- Programmable output voltage, zero pulse position, zero impulse width and pulse count.
- Connection: M12 radial plug-in connection or radial or axial cable connection
- Electrical interfaces: 5V & 24V TTL/RS-422, 24 VHDL/push pull
- Remote zero set possible

### Your benefits

- The universally-applicable spring arm enables quick and easy mounting
- The high spring tension means it can be used in applications with harsh ambient conditions
- Reduced storage costs and downtime due to programmability
- Plug-in cable connection in radial or axial direction enables customer-specific cable solutions
- Excellent concentricity even at high speeds
- Long-term and reliable operation thanks to a high enclosure rating, temperature resistance and bearing lifetime
- The ability to program using the PGT-08 programming software and the PGT-10-S display programming device enables fast and flexible adaptation of the encoder to customer requirements
- Programmable zero pulse position simplifies installation

### Fields of application

- Measurement of position and speed directly on conveyor belts in wood processing machines, steel and metal processing machines, handling and warehouse systems, sorting systems and conveyor belts, textile machines, printing and paper machines



## Ordering information

Other models and accessories → [www.sick.com/DFV60](http://www.sick.com/DFV60)

- **Type of movement at location of encoder installation:** rotary, linear
- **Mechanical adaptation:** With measuring wheel
- **Measuring wheel circumference:** 300 mm
- **Measuring wheel surface:** O-ring NBR70

Communication interface	Supply voltage	Pulses per revolution	Connection type	Resolution in pulses/mm	Type	Part no.
10 V ... 32 V, Incremental, HTL, Push pull	10 V ... 32 V	1,024	Cable, 8-wire, universal, 1.5 m	3.41	DFV60E-22EK01024	1060309
			Male connector, M12, 8-pin, radial	3.41	DFV60E-22EC01024	1060308
4.5 V ... 32 V, Incremental, TTL, HTL	4.5 V ... 32 V	65,536	Cable, 8-wire, universal, 1.5 m	218.45	DFV60A-22PK65536	1051331
			Cable, 8-wire, universal, 3 m	218.45	DFV60A-22PL65536	1051334
			Cable, 8-wire, universal, 5 m	218.45	DFV60A-22PM65536	1051337
			Male connector, M12, 8-pin, radial	218.45	DFV60A-22PC65536	1051309

## 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](http://www.sick.com)