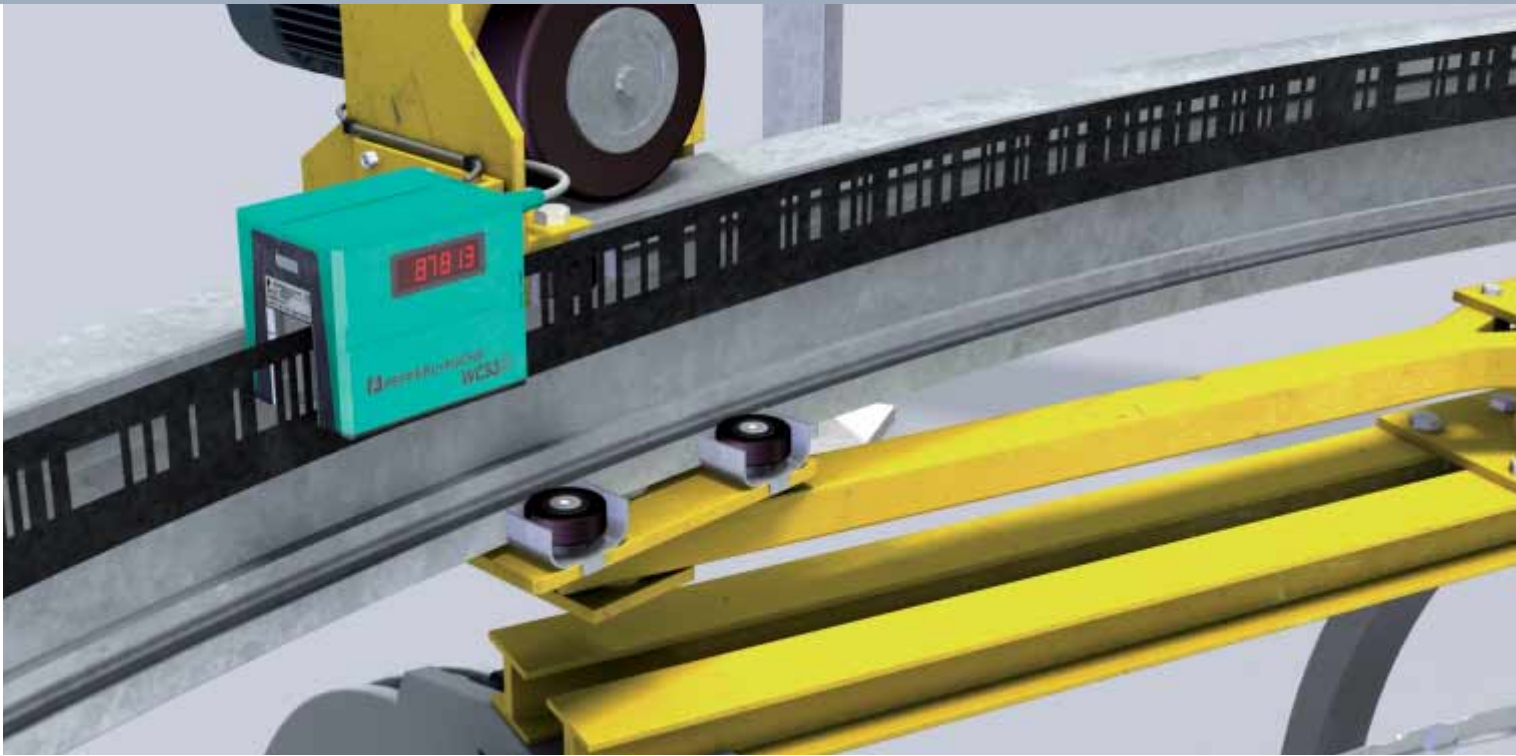


# POSITION ENCODING SYSTEM WCS2B/WCS3B





## The absolute solution for your positioning tasks

The automation of material handling plants requires millimeter-accurate information on the position of travelling carts or material handling equipment. With the WCS position encoding system from Pepperl+Fuchs, a reliable and tried-and-tested positioning system is available for the user. The WCS combines two important features: contactless and absolute. Two components are sufficient for the positioning in your application – the reading head and the code rail.

## Convincing features ...

- Absolute measuring system
- Contactless
- No-voltage protection
- No reference positions
- Resolution = 0.8 mm
- Speed up to 12 m/s
- Variable distance up to 325 m
- Suitable for curved paths
- Easy to maintain

## ... well-tried and tested in many applications

- Automatic cranes
- Slewing cranes
- Storage and retrieval machines
- Elevators
- Lifting devices
- Galvanic equipment
- Travelling carts
- Electronic overhead conveyors
- Vehicle detection





## The reading head

The U-shaped reading head scans the code rail photoelectrically and in a contactless way. Every 0.8 mm the position encoding system detects a new position value. The position value is detected regardless of temperature fluctuations. Even at high speeds, the value is provided in real time. The reading heads feature an internal control for light intensity. This ensures that the position value is detected reliably, even under difficult ambient conditions.

A special head attachment (mounting plate) enables the reading head to be installed quickly. No adjustment is required.

The data is transmitted directly from the reading head to the control via a serial RS485, SSI or CANopen interface. A wide variety of interface modules such as Profibus-DP, Profinet RT, Modbus RTU, DeviceNet or Interbus-S are available for connection to bus systems.

## The code rail

The code rail, which carries the absolute position information, is placed parallel to the track. Thus, each point of the track is assigned a unique position that can be exactly reproduced. In addition to realizing junctions and curves, it is also possible to place the code rail only where positioning is required. For a quick installation of the code rail, which is available in stainless steel or plastic laminate, well-tryed and tested mounting systems are available.



**INTELLIGENCE ON RAILS:  
PRECISE, FLEXIBLE, CONTACTLESS  
AND SIMPLY ABSOLUTE!**

# FACTORY AUTOMATION – SENSING YOUR NEEDS



Pepperl+Fuchs sets the standard in quality and innovative technology for the world of automation. Our expertise, dedication, and heritage of innovation have driven us to develop the largest and most versatile line of industrial sensor technologies and interface components in the world. With our global presence, reliable service, and flexible production facilities, Pepperl+Fuchs delivers complete solutions for your automation requirements – wherever you need us.

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