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INDEX

HOME

Detection based on “light”

Detection based on “eddy current”

Detection based on “contact”

Detection based on “ultrasonic”

Detection based on “images”

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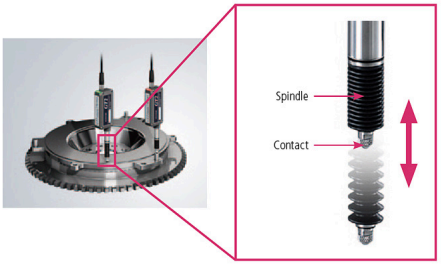
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Detection based on “contact”

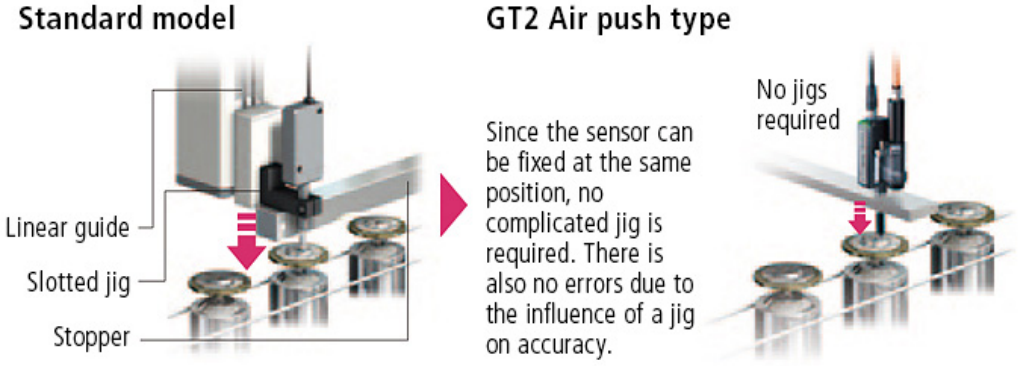
What is a Contact Positioning Sensor?

Outline

As the name indicates, this is a ***sensor measuring the position of a target by directly contacting it.*** When the height of the spindle changes as shown in the figure on the right, the sensor internally calculates the amount of displacement. Contact Positioning Sensors are mainly used for detecting the height, thickness, or warpage of the target.



Air push type measuring by extending a spindle



Since measurement is possible with the sensor head being fixed, no mechanism is required to move the sensor head. This saves installation space and greatly reduces man-hours during installation.

Features

Provisur EX1039
IPR2024-00269
U.S. Patent No. 11,331,823

The following table shows typical characteristics that vary depending on the detection system.

Sensor type comparison based on the detection method

Item	Inductive	Optical	Ultrasonic	Laser focus	Contact
Detectable target	Metal	Almost all materials	Almost all materials	Almost all materials	Solid
Measuring distance	Short	Normal	Long	Short	Short
Accuracy	High	High	Low	High	High
Response speed	Fast	Fast	Slow	Normal	Slow
Dust, water, oil, etc.	Unaffected	Normal	Normal	Normal	Unaffected
Measuring surface	Normal	Small	Large	Small	Small

INDEX

Detection based on “eddy current”
Inductive displacement sensors
What is an inductive displacement sensor?

Detection based on “contact”
Contact Positioning Sensors
Principle and types of Contact Positioning Sensors

KEYENCE Product Catalogs:

Contact Positioning Sensor options:



High-Accuracy Digital Contact Sensor
GT2 series
Catalog Download

Other related products



Self-contained CMOS Laser Sensor
LR-Z series
Catalog Download



Self-Contained Full-Spectrum Sensor
LR-W Series
Catalog Download



Digital Fiber Optic Sensors
FS-N series (FS-neo)
Catalog Download



Vision Sensor
IV series
Catalog Download

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Contact / Inquiries
Download Sensor Basics PDF
Back to top

HOME

Detection based on “light”

Photoelectric Sensors
- Outline
- Features
- Classification
- Other variations

Fiber Optic Sensors
- Outline
- Features
- Classification
- Key terms for selection

Laser Sensors:“Received light” recognition type
- Outline
- Features

Laser Sensors:“Position”recognition type
- Outline
- Features

Detection based on “eddy current”

Inductive Proximity Sensors
- Outline
- Features
- Classification

Inductive displacement sensors
- Outline

Detection based on “contact”

Contact Positioning Sensors
- Outline
- Principle and major types

Detection based on “ultrasonic”

Ultrasonic Sensors
- Outline
- Comparison with optical sensors

Detection based on “images”

Vision sensors
- Outline
- Features

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