

Factory Automation Sensors

DIGEST CATALOG

2017-2018

BRAND NEW

World's No.1 Linearity

CDX series

World's Smallest TOF Sensor

TOF-DL series

RECOMMENDATION

Photoelectric Sensors

Laser Sensors

Fiber-Sensors

Displacement Sensors

Vision Sensor

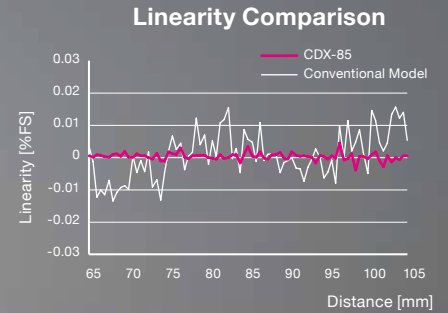


BRAND NEW



World's No. 1 Linearity $\pm 0.015\%F.S.$

Featuring the World's No. 1 linearity that easily satisfies the $[\pm 0.015\% F.S.]$ catalog specification, CDX series models realize measurements with significantly higher levels of accuracy than the conventional model.



A Fusion of Ultra High-accuracy and Ease-of-use

Ultra High-accuracy Laser Displacement Sensor

CDX series **NEW**

- High-speed measurement :
Max. sampling period of 12.5 μs
- Newly developed image sensor: ATMOS
- Feedback-free high-speed shutter



Shape measurement of cam shafts

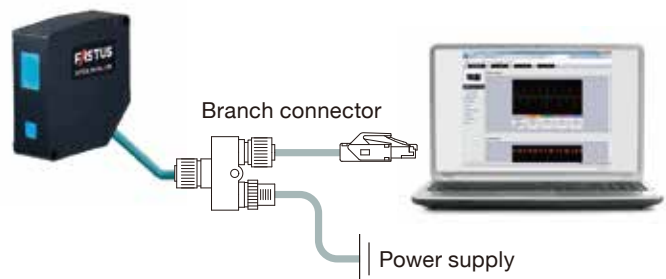


Shape measurement of tires

FASTUS

New Concept !!

Simple configuration



- Direct Network Connections are possible without use of a Controller
- Equipped with a Web Server, so setup software is unnecessary

World's **Smallest** TOF Sensor

Detect up to 2.5 m away.
"Visualize" distances with the TOF-DL compact sensor.

W:17 × D:32.8 × H:44.4 (mm)

Clearly Visible: Class 1 Laser Light Source

TOF Type with Built-in Digital Panel

TOF-DL series **NEW**

- Analog output type and 3-control-output type
- Built-in digital display for simple setup
- Size : 17 × 32.8 × 44.4 (W × D × H) mm

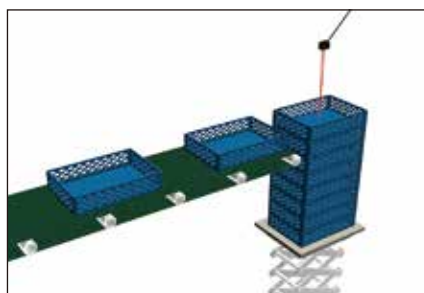


FASTUS

Easy-to-see Digital Display

TOF (Time Of Flight) method

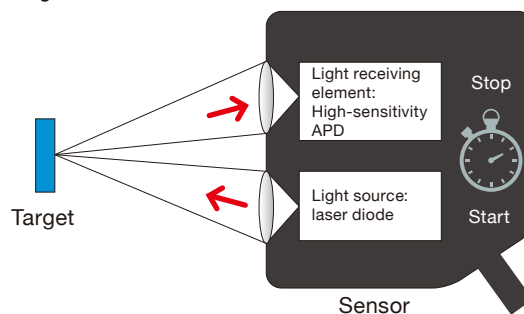
The TOF method measures the time it takes a pulse-emitted laser to hit a target and return, and the measurement is then converted into distance. With strong resistance to influences from the target's surface conditions, this method is capable of producing stable detection.



Level control for lifts



Loop control for sheet materials



Photoelectric Sensors

Best-in-class Robust and Powerful

NEW

M18 Cylindrical Type

C-R series

- Large sensing distance
- Full-metal housing in brass



Watertight IP67

Molding

Hotmelt molding enables high vibration resistance up to 100Hz, 8 hours.



Can be used on work sites or devices that are exposed to splashing water such as the food and beverage industry.

Excellent Water Resistance / Oil Resistance

Stainless Steel Housing Type

Z-M series

- Longest sensing distance in the class
- Employs a low deterioration 4-element red LED for the light source



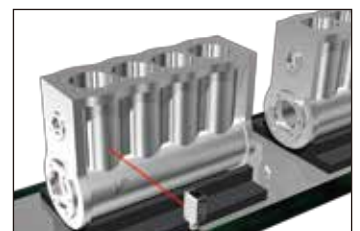
Tough against oil and coolant ! Equivalent to **IP67g** (Connector type)



Drill breakage on NC machine



Engine block detection



Cable type features water resistance of IP69K

Laser Sensors

High-resolution BGS Laser Sensor

High-resolution
C-MOS Laser Type (2-output type)

FASTUS

NEW

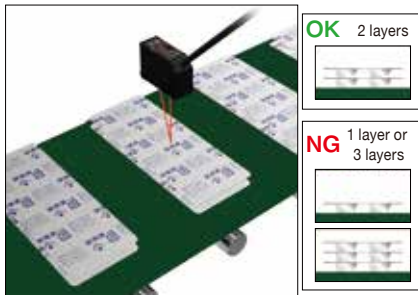
0.08mm height difference (BGS-HDL05T□)

BGS-HDL series

- The newly added BGS-HDL model is equipped with two control outputs
- Built-in controller 4-digit display



Detecting blister pack stacks
(Output 1:ON with 1 layer
Output 2:ON with 3 layers)



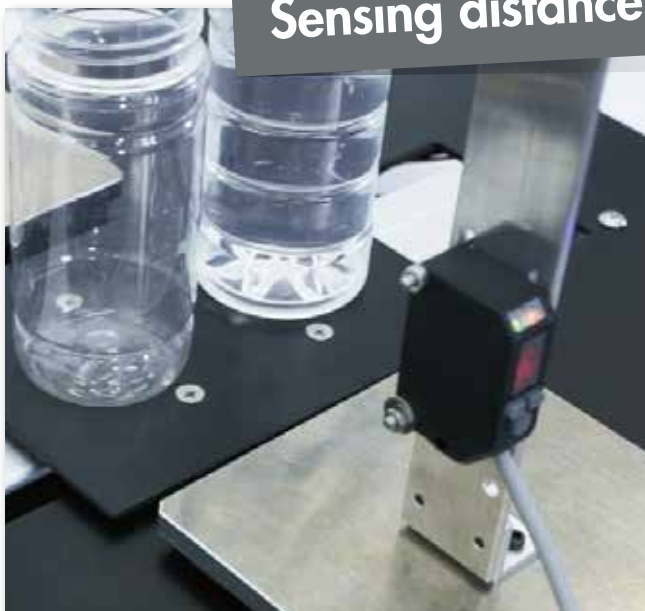
Detecting straws and float
(Output 1:ON with no straw
Output 2:ON when floating)



Super precision BGS sensor detects 0.08 mm height difference (BGS-HDL05T□)

Transparent Object Sensor

Sensing distance **4m Max.**



Achieves long range transparent object detection

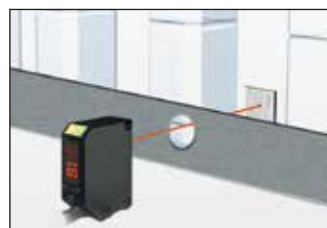
Digital Laser Type

DR-Q series



- Digital adjustment function
- Built-in ASC (Automatic Sensitivity Correction) function

Detection of plastic bottles



Detection of glass bottles



Fiber-Sensors

1-HS mode **16 μs** (stand-alone)
22 μs (linked)

High-speed Digital Type

D3RF series

- Fastest high-speed response in the world
- Widest display in the industry
- 100% display for better recognition of level change



It can detect over 30,000 workpieces per second.

Intelligent or simple

User-friendly control panel

Easy-to-press large buttons



*Actual size



Degree of protection : IP66

Low Cost Type

FISTUS

D1RF/V2RF series

NEW

- Teach-In + Display type and Potentiometer type
- Mounting holes for M3 screws

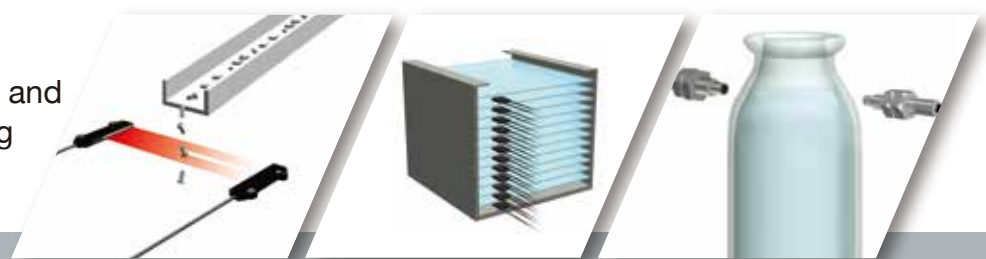


Fiber-units

Industry largest selection

NF series

Selection of optimal fiber-units and options is possible from among 200 models



Counting screws

Detecting existence of glass plates in the rack

Liquid detection in transparent bottle

Displacement Sensors

FASTUS

Compact Laser
Displacement Sensor

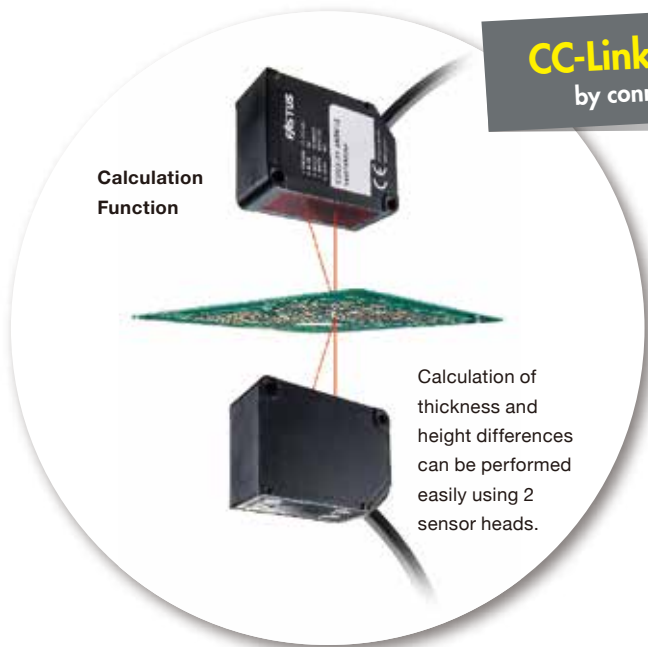
CD22 series

- Repeat accuracy : 1 μm (CD22-15□)
- Built-in amplifier & digital 4-digit display



Smallest in the class* (W18xD31xH44mm)

*Among devices equipped with displays in the 1 μm repeat accuracy class.
Optex FA examination performed November 2015.



CC-Link Communication
by connecting to UC1 series

FASTUS

Displacement Sensor Amplifier Unit

CDA series

- Up to two displacement sensors can be connected
- Features a clear organic EL display
- The external amplifier unit enables remote operation and easy calculation setting



2D Displacement Sensor

LS series **FASTUS**

- Line beam for fast, accurate measuring of height and width
- 2-dimensional measurements at a significantly low cost



Substrate overlap feed detection



Inspection for sealant application position/amount



Repeat accuracy
Height (Z axis) **2 μm**

Sampling period
Max. speed **0.5 ms**
Total sampling period **5 ms**

Vision Sensor

Simple & Easy Setup Color Area Sensor

Color Area Sensor

CVSE1-RA series

- All in one color vision sensor
- Three-Step-Teaching in 30 seconds

NEW

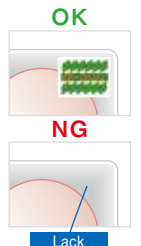
All in one



**3 step
Teaching**



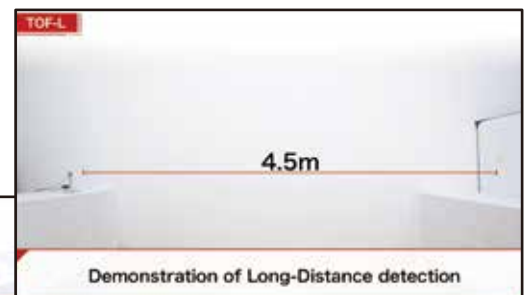
Completed!! EASY Setup



OPTEX FA Sensors Videos on **YouTube**

We provide the informational videos of our products solutions on "FASTUS TV".
You can see the introductions and features of OPTEX FA products lineup.

OPTEX FA



Access now!



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