W12-3 – The new benchmark

A stable production process – without compromise

SICK
Sensor Intelligence.

W12-3

The right choice, every time.

Robust, accurate, intelligent.

For your applications, do you expect optical sensors which cope with demanding tasks, are suited to high process speeds and achieve high availability in industrial environments? W12-3 is the right choice, every time – whether in packaging technology, the pharmaceutical industry, food environments or the bottling industry.

W12-3 – best performance in a metal housing, offering clear advantages over conventional optical sensors in respect of object detection, availability in industrial environments and sensor monitoring.

W12-3 – the benefits:

Universal object sensing

- Reliable detection of smallest objects
- Integration into high speed processes
- Precise and fast switching
- Diverse target sensing; from dark to transparent

Universal integration options

- Sensor adapts to the machine design
- Dovetail mounting
- Plug rotatable through 270°, with intermediate positions
- **New**: additional mounting hole
- **New**: cable rotatable through 270°

Operator-friendly sensors

- Faster commissioning
- Faster sensor status query
- No "specialist staff" required
- **New**: scanning distance adjustment through Teach-in
- **New**: the 360° status LEDs which are clearly visible all round
- **New**: I/0 Link, the intelligent sensor check

Process safety under extreme operating conditions!

- Outstanding security against ambient light
- High EMC resistance
- IP 69K
- ECOLAB certification
- **New**: suppression of passive optical interferences

W12-3

A stable production process – our highest priority.

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W12-3 – works more reliably – under all ambient conditions.

W12-3 – prepared for extreme operating conditions

- Reliable performance in changing ambient conditions
- Achieving greater machine availability
- Making use of universal applications

The robust metal housing ensures the sensors survival, even in case of heavy vibrations or mechanical shocks.

Electromagnetic fields?
W12-3 is protected against them.

Pressure cleaning? Not an issue: W12-3 is prepared for this and meets the requirements of IP69K.

Ambient light sources such as ceiling lights, optical reflections from metal parts or window panes are identified, evaluated and suppressed by W12-3.

The Ecolab test demonstrates a high resistance to detergents and disinfectants.

Temperature variations?
Uses in the temperature range of −40 °C to +60 °C are normal for W12-3.

W12-3 – flexible, operator-friendly.

Turn and twist it any way you like – W12-3 always fits anywhere:

Rotatable plug or cable connections provide flexible cable routing options.

Versatile mounting options such as dovetail mounting, lateral mounting holes and mounting holes with threads ensure maximum flexibility.

Thanks to the slim-line housing the W12-3 is easy to integrate and adaptable to your system.
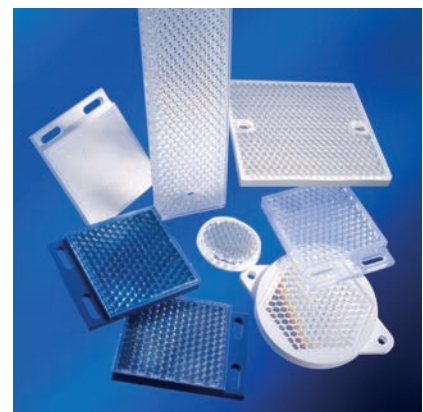
Operator-friendliness is an important aspect of the W12-3.

The commissioning of a W12-3 is fast, easy and does not require lengthy training or specialist staff.

The excellent all-round visibility of the 360° status LEDs enables faster, easier and more effective sensor diagnostics.

Scanning distance adjustment via Teach-in saves time. Place the object in the beam path, press the button, ready.

Comprehensive accessories such as mounting brackets or cables with plugs in many different designs facilitate sensor mounting and installation. High-quality reflectors ensure top performance of photoelectric switches.

⦿ IO-Link

**Seeing applications through
the eyes of the sensor**

As a technological pioneer of field
bus-enabled binary sensor technolo-
gy, SICK presents the WT12-3 with
I/O-Link: the new communication
standard for the integration of the
sensor/actuator level into automation
systems.

For instance, **WT12-3 I/O-Link** can
be parametrised and monitored via
field bus. Thus, preventative mainte-
nance and service measures can be
implemented, and changeover times
for product or format changes can be
significantly reduced.

W12-3 – Redefining the limits of what is possible.

Food/beverage industry
Detecting bottles, counting cups, positioning trays

Packaging technology
Reliably detecting many different packaging materials and designs, coping with demanding tasks

The quality of your system is heavily influenced and determined by the uses of optical sensors.

Safeguard and increase the added value of your system with W12-3 – the best in innovative sensor technology. W12-3 – photoelectric switches for high-end automation.

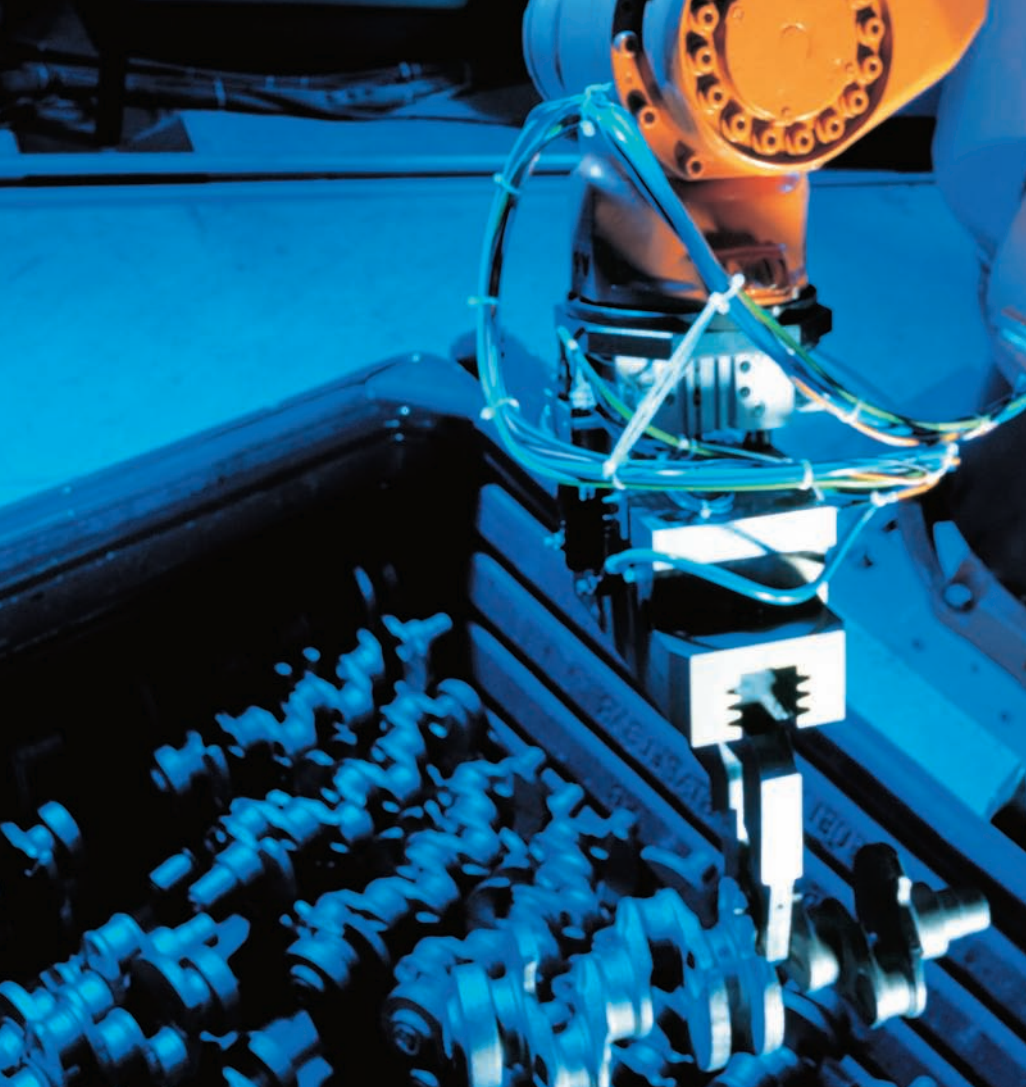**W12-3 offers comprehensive, reliable object detection:**
• from light to dark
• from near to far
• from reflective to transparent
• from thin to thick
• from flat to curved

Pharmaceutical
Positioning transparent ampoules, detecting and counting the smallest tablets

Printing and paper industry
Counting printed copies, detecting paper web tears

W12-3 – the sensor platform

Today's companies think and act concentrating on processes rather than functions. Rigid division of labour is abandoned, and the process of adding value is fully optimised.

The answer does not lie in narrow individual measures, but in wide ranging solutions.Because market and customer needs change permanently, innovative sensor solutions evolve from extensive dialogue with customers.

Customer success is our concern. Proven solutions in thousands of applications in nearly all industries prove it. We understand your language and your concerns.

W12-3 is based on the wide-ranging experience and the application expertise found in the predecessor ranges W12 and W12-2, which have been the benchmark in automation for more than a decade.

Different principles of operation enable a wide field of application in many different areas of automation technology.

W12-3 – Product diversity, customer-specific solutions included.

W12-3: convincing through variety.
Top sensor technology, adapted and optimised to suit individual applications.

W12-3: simply flawless.
Whatever sensing principle you select: housing, mounting and connection features are uniform throughout the entire series. Sensor variety with minimum mounting and installation effort.

W12-3 is customer-focussed.
W12-3 covers a wide range of applications, but also leaves space for customer-specific adaptation. This ensures maximum freedom when selecting sensors.

Approvals:

ECOLAB®

CE

RoHs

IP69k

UL class2

W12-3. The complete series		
WTF12-3		**With foreground suppression.** For the safe detection of objects with non-homogeneous surfaces.
WTB12-3		**With background suppression.** Outstanding object detection, effective background suppression, optimum result.
WL12-3		**With autocollimation principle.** For reliable object sensing at extremely close range.
WL12G-3		**For the detection of transparent objects.** Safe sensing, from PET bottles to transparent films.
WSE12-3		**For long ranges.** Ideal solution for applications requiring greater performance reserves or very long ranges.

FACTORY AUTOMATION

With its intelligent sensors, safety systems, and auto ident applications, SICK realises comprehensive solutions for factory automation.

- Non-contact detecting, counting, classifying, and positioning of any types of object
- Accident protection and personal safety using sensors, as well as safety software and services

LOGISTICS AUTOMATION

Sensors made by SICK form the basis for automating material flows and the optimisation of sorting and warehousing processes.

- Automated identification with bar code and RFID reading devices for the purpose of sorting and target control in industrial material flow
- Detecting volume, position, and contours of objects and surroundings with laser measurement systems

PROCESS AUTOMATION

Analyzers and Process Instrumentation by SICK MAIHAK provides for the best possible acquisition of environmental and process data.

- Complete systems solutions for gas analysis, dust measurement, flow rate measurement, water analysis or, respectively, liquid analysis, and level measurement as well as other tasks

Worldwide presence with subsidiaries in the following countries:

Australia

Belgium/Luxembourg

Brasil

Ceská Republika

China

Danmark

Deutschland

España

France

Great Britain

India

Italia

Japan

Nederlands

Norge

Österreich

Polska

Republic of Korea

Republika Slovenija

România

Russia

Schweiz

Singapore

Suomi

Sverige

Taiwan

Türkiye

USA/Canada/México

Please find detailed addresses and additional representatives and agencies in all major industrial nations at **www.sick.com**

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