It's set up!
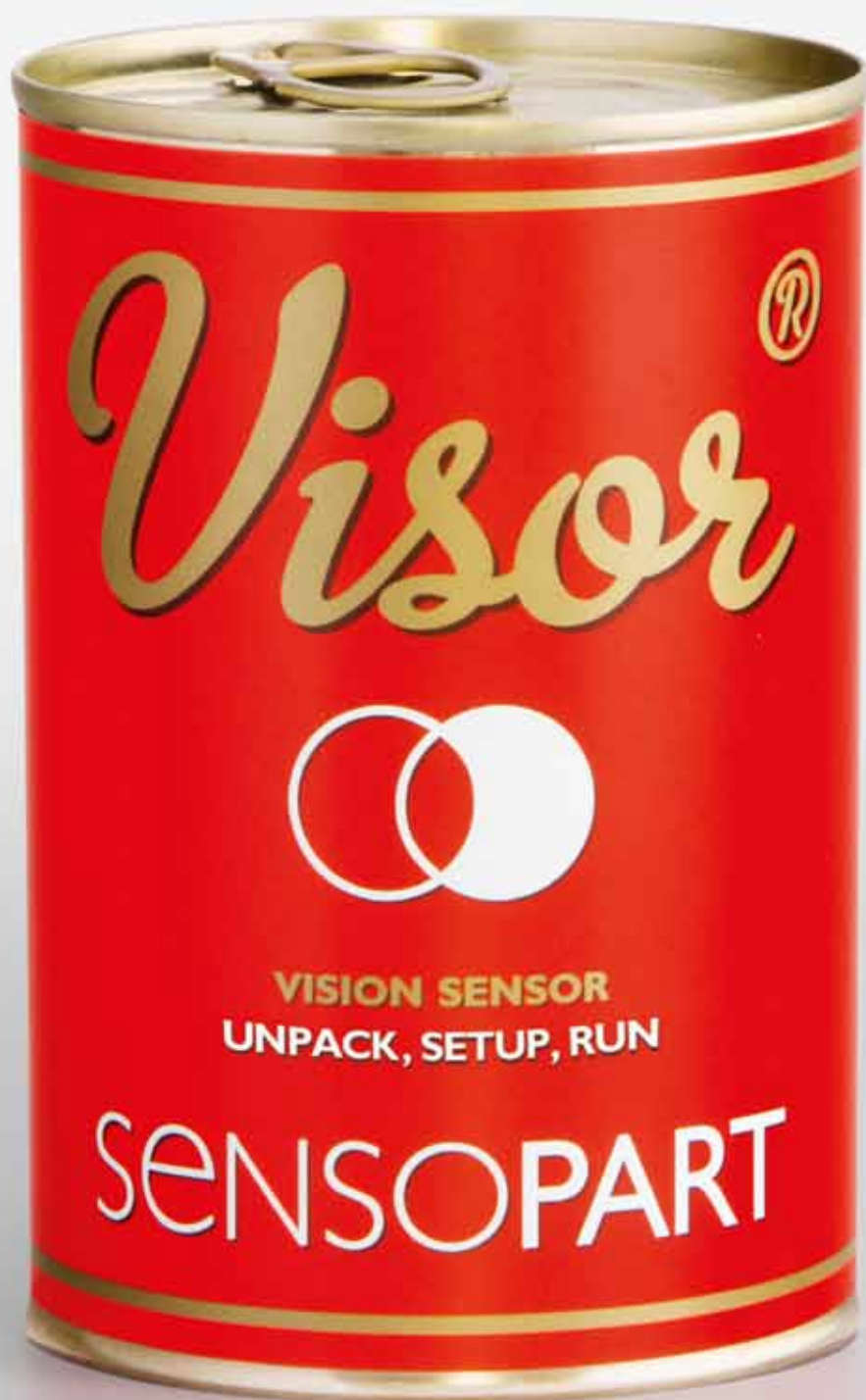
VISOR®. The vision sensor for fast implementation.

Unpack, set up and run – never before have vision sensors been so powerful and so easily and intuitively operated. The VISOR® is ready for operation in just ten minutes with a few mouse clicks. With VISOR® technology from SensoPart there is now a simple and effective solution for even the most difficult of automation tasks. Whether objects with complex shapes, colour detection, data matrix codes, self-illuminating display elements, or edge breakouts on solar cells – our application-specific vision sensors reliably detect all relevant object features.

Housings
Integrated evaluation unit with powerful signal processor, IP 67 enclosure rating, vibration-proof

Mounting
Simple and flexible mounting thanks to dovetail

Illumination
Integrated LED illumination (white, red, infrared, UV)

Interfaces
Integrated communication interfaces (Ethernet, serial interfaces, digital I/O)

Lens
Integrated lens or C-mount variants for long distances

Unmasked!

Regardless of if black, white or brightly
coloured – our sensors miss nothing.

Who can see the tiger? Distinguishing object from background can sometimes be a real art. Photoelectric proximity sensors from SensoPart master this art with ultimate perfection. Thanks to their excellent background suppression they see precisely what matters: the object itself – and nothing else!

Reliable object detection
- Independent of the target object's size, shape, colour, material and surface properties
- Detection according to the principle of distance measurement: precise and reliable

High process stability
- Reliable suppression of unwanted reflections and ambient light
- Suppression of moving parts in the background (e.g. the transport belt, machine parts, persons)
- Reliable detection of target objects even at low distances to the background

The economical solution
- Applicable for all task areas
- Rapid commissioning via simple teach-in
- Long machine running times thanks to quality sensors from SensoPart, made in Germany

Tough

Our sensors are industry-oriented down to the last detail

ECOLAB

Ecolab is an established industry standard in the disinfection and detergent industry, providing a standardised test process.

Robust in any location
Thanks to their well thought-out designs and excellent workmanship, products from SensoPart are ideally equipped for harsh industrial conditions. Stable, tightly sealed housings and tough metal plugs make our sensors particularly reliable and long-lived. They withstand vibrations and daily cleaning with steam or water jets.

Well thought-out down to the last detail
The mounting holes of our sub-miniature sensors in the F 10 series are reinforced with metal eyelets. This prevents the housing from being damaged during installation through the use of screws that are too large or too great a torque.

An intelligent solution
The stainless steel sensors of the F 55 series are operated via a flush piezo-metal button which, in contrast to conventional moving operating buttons, is integrated in the sensor housing with a perfect seal – an intelligent solution for hygienically sensitive areas.

Industrial environments are not exactly gentle: dust and dirt, vibrations and tightly gripping hands belong to the harsh everyday experiences undergone by every sensor. All components, from the housing with its plug connections, through the mounting technology, to the optical and electronic assemblies must therefore be designed in such a way that damage is largely ruled out even under poor ambient conditions.

At SensoPart we place the highest value on the robustness and long service-lives of our products: the sensor housings are made of resistant materials (glass-fibre reinforced plastic, die-cast aluminium, or stainless steel) and tightly sealed (IP 67 or IP 69K) so that even cleaning with a jet of steam cannot harm them. Indestructible metal plugs do not give in even when faced with

strong tensile loading, and a special injection process protects the sensors' electronic inner life from impacts and vibrations. Special mounting brackets offer additional protection when things get really hard.

Reliable function under all conditions

The industrial appropriateness of a sensor is not only a result of mechanical strength but also sensoric robustness. Thanks to their excellent background suppression our proximity sensors, for example, are immune to interfering effects such as incidental sunlight or reflections from bright metal parts. Varying target object colours also have no effect on their reliable function. Our sensors do exactly what one expects of them even under adverse conditions.

The IP 69K enclosure rating permits high-pressure cleaning at high temperatures. A jet of steam or water at a pressure of 100 bar and a temperature of 80°C, hitting the sensor from any direction, must not cause damage.
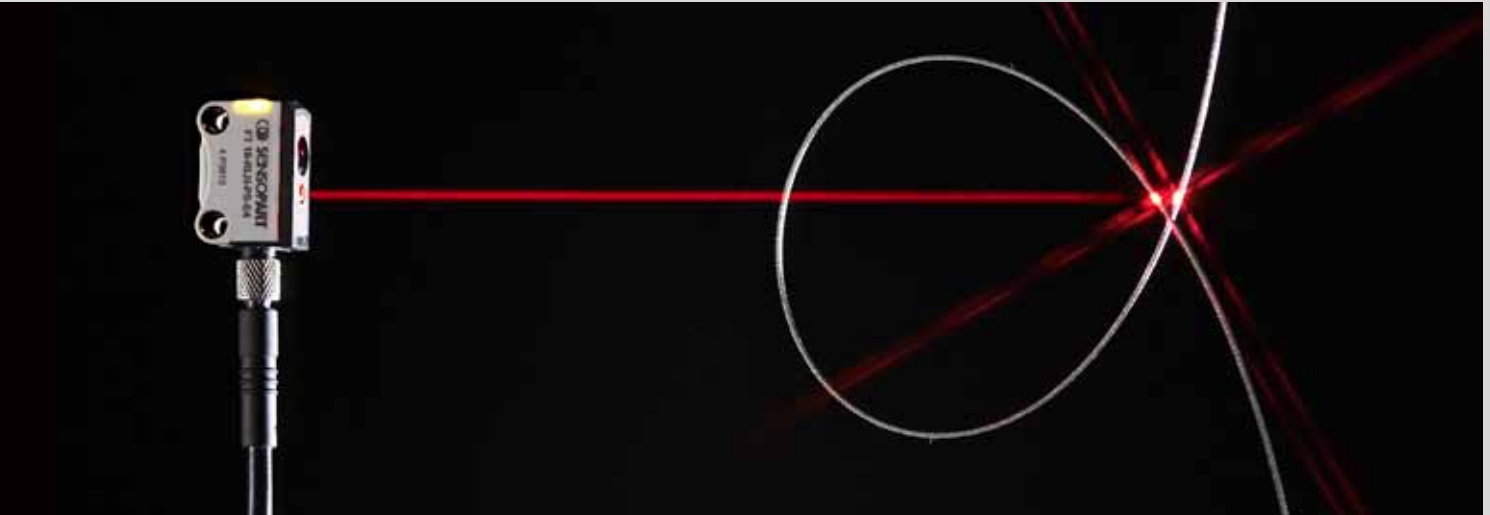
Firmly anchored
SensoPart offers suitable mounting solutions for the most varied of installation situations. Our retaining and fixing brackets are extremely stable and unshakeably hold the sensor in its place. Special designs with additional sensor protection are also available.

The greater the accuracy, the better

Our sensors are the best in their class regarding precision and reliability

To the point. Precisely
*The sensors of the F 10 and F 25 series
are experts in small-part detection. Even
objects of only a few tenths of a milli-
metre are reliably detected. The precise
background suppression is adjustable
via potentiometer or teach-in, and en-
sures trouble-free operation.*

With a reliable view
*Sensors from SensoPart are the first
choice for all applications in which preci-
sion, reliability and reproducibility matter.
They detect objects of differing shapes,
colours and sizes – even against bright
backgrounds and with highly reflective
machine parts.*

The performance of average sensors is quite sufficient for many standard tasks in factory automation. But the wheat is separated from the chaff as soon as demands for accuracy and reliable function increase: in such cases one is well advised to choose a sensor from SensoPart. Because our sensors are always among the best in their class and thus offer, when it matters, the decisive advantage regarding performance or accuracy.

Process reliability. Background suppression from SensoPart

Above all our laser sensors: they reliably detect even tiny parts thanks to their precise, clearly contoured light spots. Sub-miniature photoelectric proximity sensors with background suppression in our F 10 series can thus easily detect a wire with a diameter of just 0.5 mm at a distance of 60 mm. And the quality of our sensors' background suppression is absolutely top class.

VISOR® – in a class of its own

Our vision sensors are also very popular among users: our new VISOR® series – with their rapid image processing, bright integrated LED illumination, and sophisticated evaluation algorithms – are absolutely first class. Whether for object detection in pick & place applications, the evaluation of 1D and 2D codes, or the detection of damaged edges on solar cells – in every specific application the sensors of the VISOR® platform show just how much technological expertise they contain.

Rapid but nevertheless accurate
High throughput rates are important in solar cell production. But this must not be achieved at the cost of accuracy. A case for the VISOR® Solar sensor from SensoPart!
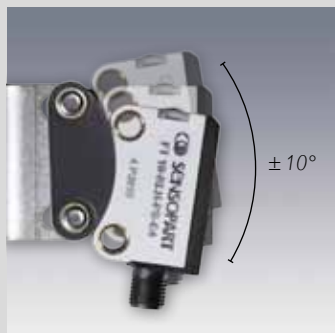
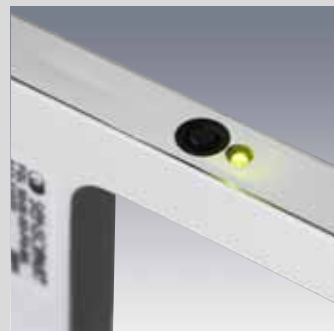# Simply clever!

Our sensors make life easy for users

Simple mounting

The bracket, rotatable around two axes, considerably simplifies the alignment of vision sensors. Whereby it is extremely robust and does not become misaligned even with impacts and vibrations.

± 10°

Comfortable fine alignment

Sensors can be precisely aligned after mounting thanks to the integrated dovetail guide (left). Mounting on a bar bracket is similarly easy (right).

Uniform operation

SensoPart uses a uniform teach-in operating concept for all its photoelectric sensors and proximity sensors, simplifying the operation of new products for users. The Teach-in button can be locked after setup to prevent any unintentional readjustment. Logically arranged LEDs show the switching state.

Flexible cabling

The rotatable cable attachment or plug simplifies cabling, particularly when installation space is limited.

IO-Link

EtherNet/IP

PROFI

Interfaces as required

Our sensors have all the common interfaces and thus permit simple integration in higher-ranking control systems. Switching sensors are optionally available with the IO-Link interface, while vision sensors can be equipped with the fieldbus interfaces EtherNet/IP or PROFIBUS via an adapter.
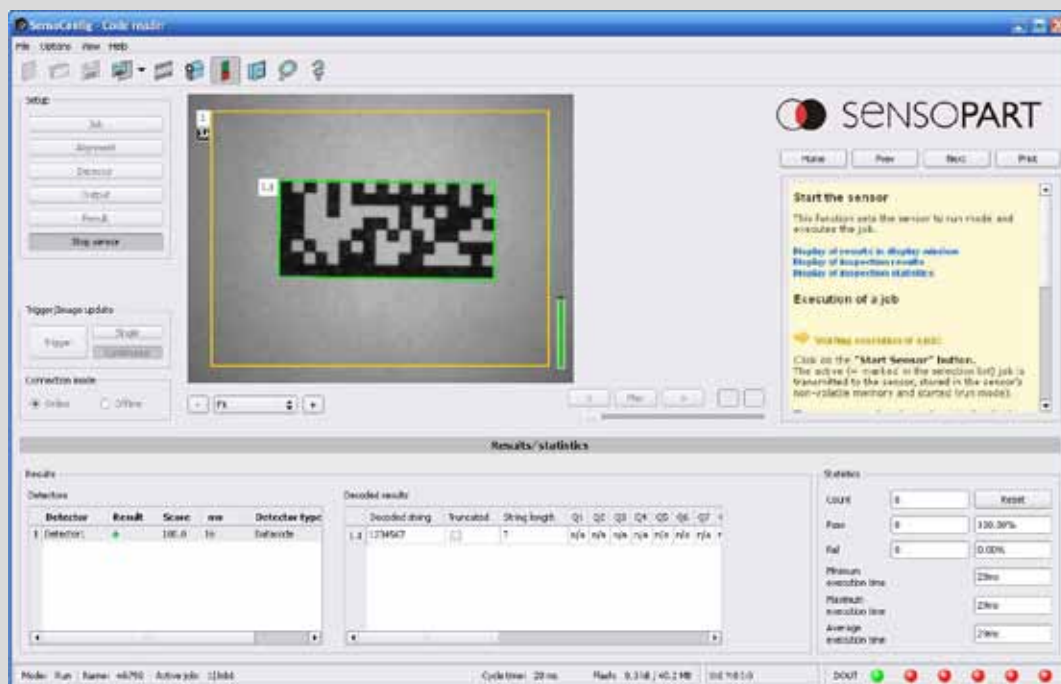
Automation tasks can be very complex. But this by no means requires a complicated solution for users. At SensoPart we place great worth on developing technically convincing but nevertheless user-friendly solutions.

This already starts during installation: a large choice of well thought-out mounting elements permits installation in every conceivable location. Dovetail mounting, possible with many of our sensors, is particularly flexible, considerably simplifying retroactive fine alignment. We have also ensured that cabling is flexible – by means of rotatable cable and plug connections.

The setup of our sensors optionally takes place via potentiometer, teach-in, control line or – particularly user-friendly – via IO Link. The Auto-detect function for automatic PNP/NPN switchover of the switching output is also a clever idea.

VISOR® – image processing for everyman
The vision sensors of the VISOR® series are good examples of SensoPart's user-friendly philosophy: we have made quite complex image processing so easy that handling and operation are not much more complicated than that of switching sensors – so that machine operators also have no problem.

Setup in just a few steps
The user interface of the VISOR® configuration program offers a simple and comprehensible design.
One need not be an image-processing expert!