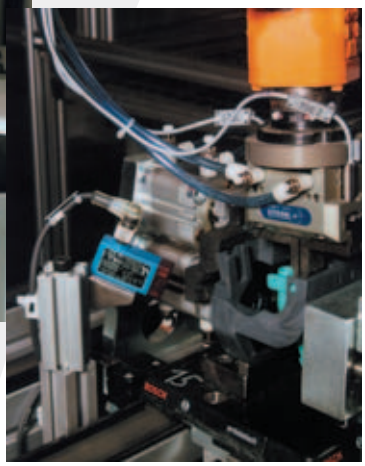
Diffuse Reflex Sensors

Infrared Light

Functional principle
The transmitter and the receiver are integrated into a single housing.

The sensor evaluates light reflected from the object. If the object passes within the selected range, the output is switched.
Bright objects reflect more light than dark objects and can thus be recognised from greater distances.

Applications
Checking for the presence of objects
Object recognition
Object counting



Outputs
PNP and NPN switching outputs, as well as a contamination output and an RS-232 interface are included.

Interface
Sensor functions can be activated and scanning results can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed with a potentiometer. With Teach-In versions, adjustments are made with the appropriate keys, externally or via the RS-232 interface.

Features
HD03__
Thanks to fine focusing optics, these sensors are especially well suited for the recognition of objects at short distances, and in front of backgrounds (e.g. in front of machine components, on conveyor belts etc.). They are preset at the factory to the specified detection range. The detection range can be adjusted with a potentiometer for the HD03PA.

Universal Diffuse Reflex Sensors

Infrared Light, Blue Light, Red Light

Functional principle
The transmitter and the receiver are integrated into a single housing.

The sensor evaluates light reflected from the object. If the object passes within the selected range, the output is switched.

Bright objects reflect more light than dark objects, and can thus be recognised from greater distances. The colour of the object has no influence on working range in barrier mode operation.

These sensors are equipped for use with Glass Fibre Optic Cable. They can be used with or without glass fibre-optic cable. The use of Glass Fibre Optic Cable is especially advantageous at difficult to access locations and in high temperature zones of up to 300° C, as well as in applications with limited space availability. Diffuse Reflex and Through-Beam operation are both possible.

Applications
Object recognition
Edge detection
Use in high temperature zones of up to 300° C
Applications with limited space availability
Recognition of objects inside packages

Outputs
PNP and NPN switching outputs, as well as an analogue output and an RS-232 interface are available.

Interface
Sensor functions can be activated, and scanning results can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed with a potentiometer. With Teach-In versions, adjustments are made with the appropriate keys, externally or via the RS-232 interface.

Features
UF44PA3S__
These sensors are especially well suited for the recognition of colour markings.

UF__ MG__
These sensors are equipped with an analogue output. They are intended for distance measurements applications.

UF__MV__
These sensors are equipped with an analogue output. They are intended for use as light barriers. Output voltage is proportional to the obstructed portion of the glass fibre bundle.

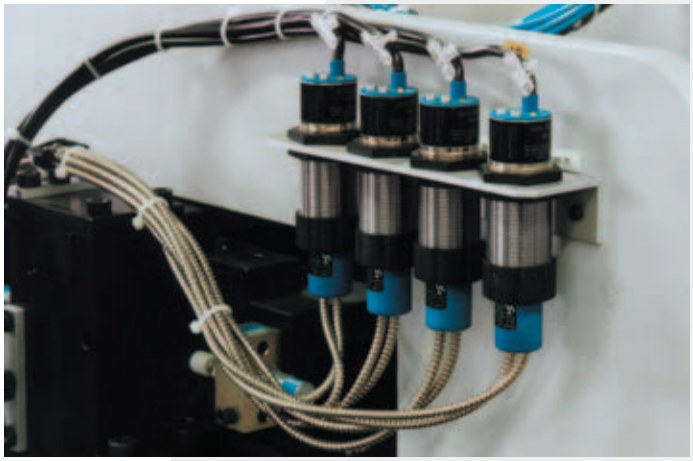
Glass Fibre Optic Cable

Functional principle
Glass Fibre Optic Cable can be used in reflex mode, as well as in barrier mode operation.

Glass Fibre Optic Cable can be attached to appropriate universal diffuse reflex sensors. The Glass Fibre Optic Cable can be precisely matched to the user's application with the help of the wenglor® selection system.

Step index fibres are used for all Glass Fibre Optic Cable. They are highly resistant to chemicals and excessive temperatures.

Applications
Applications with limited space availability
Where excessive temperatures prevail
In extremely aggressive environments
For installation to machine components



Diffuse Reflex Sensors for use with Fibre Optic Cable

Red Light

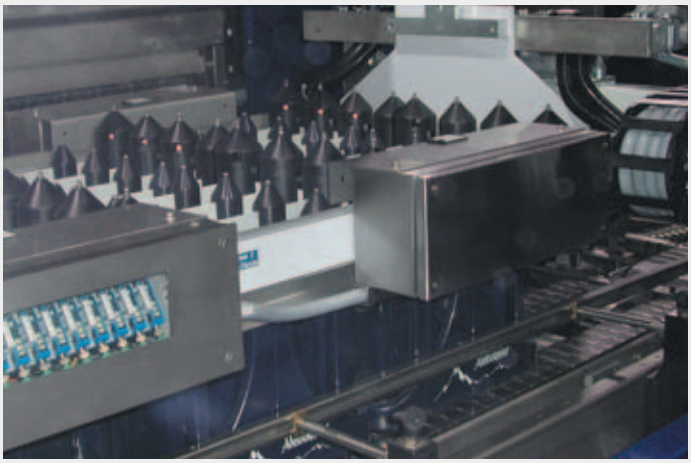
Functional principle
The transmitter and the receiver are integrated into a single housing.

The sensor evaluates light reflected from the object. The output is switched if the object passes within the selected range (reflex mode), or if the active light beam is interrupted (barrier mode).

Bright objects reflect more light than dark objects, and can thus be recognised from greater distances. The colour of the object has no influence on working range in barrier mode operation.

These sensors are equipped for use with plastic and Glass Fibre Optic Cable.

Applications
Use with Plastic and Glass Fibre Optic Cable
Use in high speed operations



Outputs
PNP and NPN switching outputs, as well as a contamination output and an RS-232 interface are included.

Interface
Sensor functions can be activated, and scanning results can be acquired via the RS-232 interface.

Adjustment
Adjustments are made with a key potentiometer, by means of Teach-In, externally or via the RS-232 interface.

Plastic Fibre Optic Cable

Functional principle
Plastic Fibre Optic Cable can be used in reflex mode, as well as in barrier mode operation.

Plastic Fibre Optic Cable can be attached to suitable reflex sensors. The Plastic Fibre Optic Cable is supplied in standard lengths of 2 metres, and can be cut to length as required by the user. Special cable types are available upon request.

Applications
Applications with limited space availability
For attachment to moving parts

Reflex Sensors with Background Suppression

Laser Light (red), Red Light, Infrared Light

Functional principle
The transmitter and the receiver are integrated into a single housing.

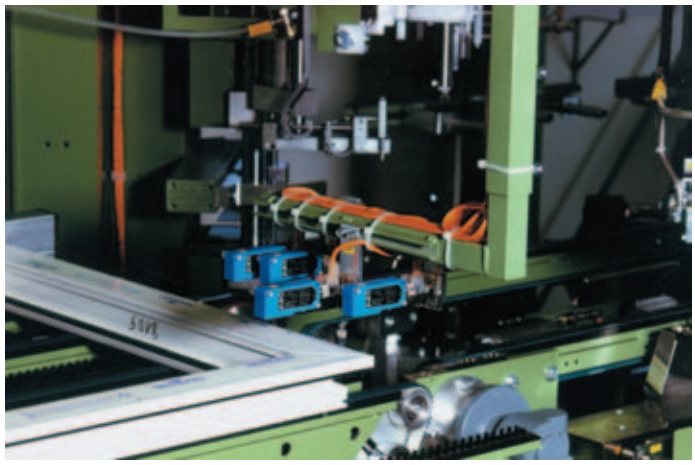
The sensor evaluates light reflected from the object. If the object passes within the selected range.

The sensors function in accordance with the principal of angular measurement. For this reason, the object's colour, shape and surface characteristics have practically no influence on detection range. Even dark objects can be reliably recognised against bright backgrounds.

These sensors function in accordance with the principal of electronic and electromechanical background suppression, as well as the principle of triple beam correction. It is thus possible to achieve highly accurate background suppression regardless of mechanical design.

Outstanding switching accuracy is also assured for Teach-In sensors by means of electronic background suppression.

Applications
Checking for the presence of objects
Recognition of minimal height differences
Recognition of all types of objects, even in front of any type of background
Recognition of all types of packaging
Indication of fill-levels and stack heights
Edge recognition
Shelf-full messages for automated rack systems



Outputs
PNP and NPN switching outputs, as well as a contamination output and an RS-232 interface are available.

Interface
Sensor functions can be activated and scanning results can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed with a potentiometer. With Teach-In variants, adjustments are made with the appropriate keys, externally or via the RS-232 interface.

Laser Reflex Sensors for Measuring Tasks

Laser Light (red), Red Light, Infrared Light

Functional principle
The transmitter and the receiver are integrated into a single housing.

The sensors measure the distance between the sensor and the object.

These sensors function in accordance with the principal of angular measurement. For this reason, the object's colour, shape and surface characteristics have practically no influence on measurement results.

A voltage within a range of 0 to 10 V DC is made available at the analogue output and is proportional to the measured distance.

Applications
High precision positioning
Thickness, height and distance measurements
Static and dynamic differential measurements
Diameter monitoring
Vibration measurement
Contour measurement
Monitoring of two-layer materials

Outputs
One analogue output and one error output are included.
Several sensor types are equipped with an additional PNP/NPN switching output.

Adjustment
Adjustments are performed with a potentiometer.

Features
HT__MGV80
These sensors are equipped with an analogue output, as well as a switching output. ON and OFF points can be adjusted with the help of two potentiometers. The devices are thus especially well suited for Go/No-Go applications. The sensors function in accordance with the principle of triple beam correction, which rules out edge effects and angle error independent of mounting position.

Reflex Sensors for Distance Measurement with Laser Light
The extremely small, highly visible spot allows for easy initial start-up and adjustment.

The sensors are capable of great accuracy within the µm range.

Reflex Sensors for Distance Measurement with Red Light
Thanks to their visible red spot, these sensors are quite easy to adjust, making initial start-up very simple.

Reflex Sensors for Distance Measurement with Infrared Light
These sensors have an invisible spot. They are distinguished by a very large working range.

CP_24/_35
The output signal of the diffuse light sensor with photodiode line array technology is practically independent of brightness, colour and surface characteristics of the object to be measured.

The measured value can be read out as a voltage value within a range of 0 to 10 V, as a current value within a range of 4 to 20 mA, or in digital format via the RS 232 interface.

A rising or falling characteristic curve can be selected.

The measuring range can be selected individually within the sensor's working range.

A precise error message is generated if the measuring range is exceeded, or in the event of non-measurable surfaces or system errors.

Transit Time Sensors for Measuring Tasks

Laser Light (red)

Functional principle
The transmitter and the receiver are integrated into a single housing.

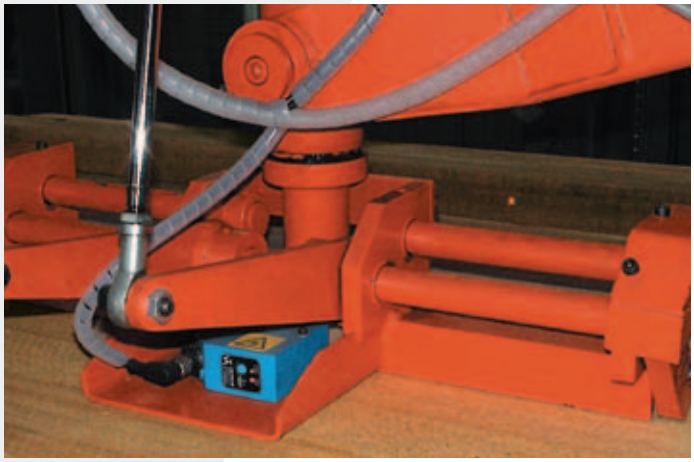
The sensors measure the distance between the sensor and the object.

They function in accordance with the principle of transit time measurement. For this reason, the object's colour, shape and surface characteristics have practically no influence on measurement results. Even dark objects can be reliably recognised against bright backgrounds.

Large working ranges and distances are achieved by these sensors.

Depending upon type, sensors may or may not require a reflector.

Applications
Recognition of objects at great distances
Position detection for factory conveyor vehicles
Measurement of diameters and height differences
Loop controls
Fill-level measurement
Fuzzy logic
Position detection for electrical overhead conveyors
Shelf-full messages for automated rack systems
Go / No-Go testing



Outputs
PNP and NPN switching outputs, as well as an analogue output and an RS-232 interface are available.

Interface
Sensor functions can be activated, and measuring results can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed with a potentiometer. With Teach-In versions, adjustments are made with the appropriate keys, externally or via the RS-232 interface.

Print Mark Sensors

White Light

Functional principle
The transmitter and the receiver are integrated into a single housing.

These sensors have been specially designed to recognise print marks.

They have a very small spot, and use a white light LED with long service life. Only one sensor is required for the recognition of all colour combinations, as well as the difference in brightness between printed markings and the background.

Applications
Print mark recognition
Recognition of all types of printing
High-speed print mark recognition

Outputs
PNP and NPN switching outputs, as well as an RS-232 interface are available.

Interface
Sensor functions can be activated, and measurement results can be acquired via the RS-232 interface.

Adjustment
Adjustments are made with the Teach-In keys, externally or via the RS-232 interface.

Features
WM03
WM03__ series sensors are capable of differentiating amongst extremely fine grey tone variations within a scale of black to white. They are equipped with various Teach-In modes (e.g. dynamic Teach-In, two point Teach-In and window Teach-In), which allow for optimised sensor adjustment for any application. Beyond this, the sensors are equipped with a delay function for time delayed deactivation of the output.

WP02 / WP04

WP02_ und WP04_ series sensors are distinguished by high geometric and contrast resolution. These sensors can be adjusted for use with any application thanks to an extremely small spot, high switching frequency and a white light diode with longer service life. Various Teach-In modes are available in this case as well. Additionally, the switching threshold can be readjusted with the help of a key potentiometer. All sensor settings can also be selected via the integrated RS-232 interface, and values generated by the sensor can be read out via the same interface.

Reflex Sensors for Contrast Recognition

Laser Light (red)

Functional principle

The transmitter and the receiver are integrated into a single housing.

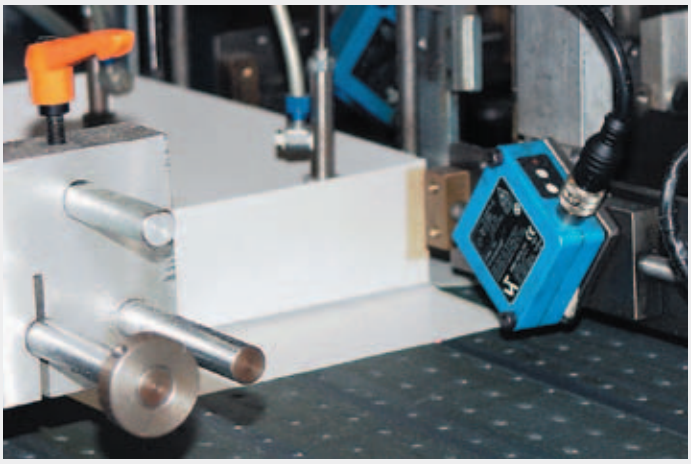
These sensors measure the brightness of the object.

The switching threshold is set to a specified degree of brightness. The brightness of the scanned surface is compared with the specified brightness value by integrated analysis electronics.

Bright objects reflect more light than dark objects, and can thus be recognised from greater distances.

Applications

Recognition of contrast markings
Recognition of markings on encoding discs
High speed recognition of extremely small parts and markings
Wire recognition
Rapid edge detection
Rapid counting of plug connectors



Adjustment

Adjustments are performed with a potentiometer.

Outputs

PNP and NPN switching outputs are available.

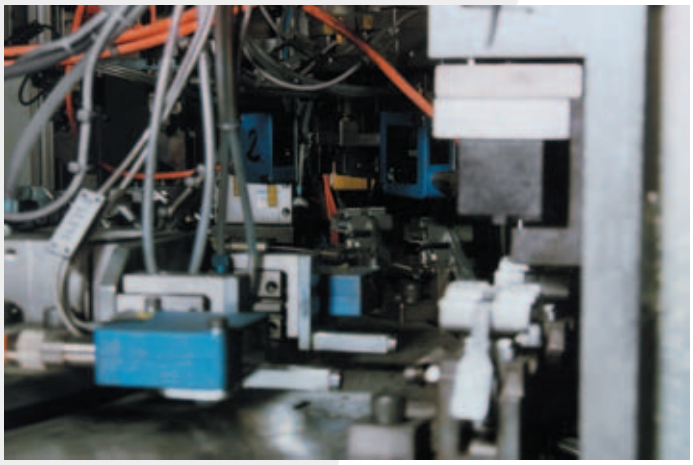
Reflex Sensors for Contrast Measurement

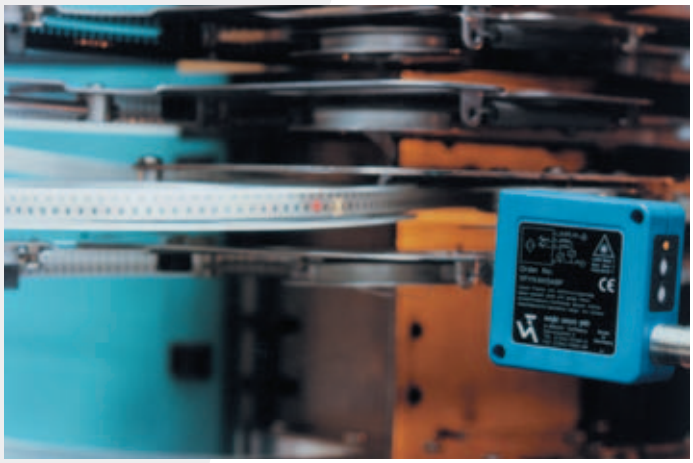
Laser Light (red)

Functional principle
The transmitter and the receiver are integrated into a single housing.

These sensors measure the brightness of the object. A voltage within a range of 0 to 10 V DC is made available at the analogue output and is proportional to the measured degree of brightness. Voltage increases along with the degree of brightness. A switching output allows for brightness monitoring with a pre-selected value.

Applications
Monitoring of brightness variation
Monitoring of drying status
Object sorting





Outputs
PNP and NPN switching outputs, as well as an analogue output are available.

Adjustment
The switching threshold of the analogue output is adjusted with a potentiometer, or by applying a voltage within a range of 0 to 10 V DC. This is especially advantageous for applications with frequently changing contrast markings.

Gloss Sensors

Laser Light (red)

Functional principle
The transmitter and the receiver are integrated into a single housing.

These sensors are capable of differentiating between surfaces with glossy and matt finishes.

Applications
Recognition of transparent labels on white backings, glass and plastic surfaces
Recognition of adhesive tape on surfaces
Monitoring of application and drying of glues and paints
Recognition of glass ampules inblister packages

Outputs
PNP and NPN switching outputs are available.

Adjustment
Adjustments are performed with a potentiometer.

Reflex Sensors for Roller Conveyor Systems

Infrared light

Functional principle
The transmitter and the receiver are integrated into a single housing.

Thanks to a special mechanical design developed by wenglor®, these sensors can be mounted between the rollers of a roller conveyor system.

The sensors function in accordance with the principal of angular measurement. For this reason, the object's colour, shape and surface characteristics have practically no influence on the sensor's ability to recognise conveyed materials. Guides at the side of the conveyor system and interfering backgrounds have no influence on the sensor.
The sensors are equipped with control logic for congestion-free and collision-free transport.

Applications
Recognition of objects on roller conveyors
Complete control of roller conveyor systems

Outputs
PNP and NPN switching outputs, as well as control outputs are available.
A solenoid valve for pneumatic control is integrated in various version.

Adjustment
Adjustments are performed with a scaled and calibrated potentiometer.

Features
Sensors for roller conveyors with integrated control logic can be used to activate and deactivate individual accumulation stations within the conveyor system either electrically or pneumatically. The sensors can thus be used to replace mechanical actuating flaps.

Up to 60 sensors for roller conveyors with integrated control logic can be electrically coupled with a plug connector. Electrical power supply is accomplished by means of an OPT114 switching amplifier, or with an adapter plug.

Retro-Reflex Sensors for Roller Conveyor Systems

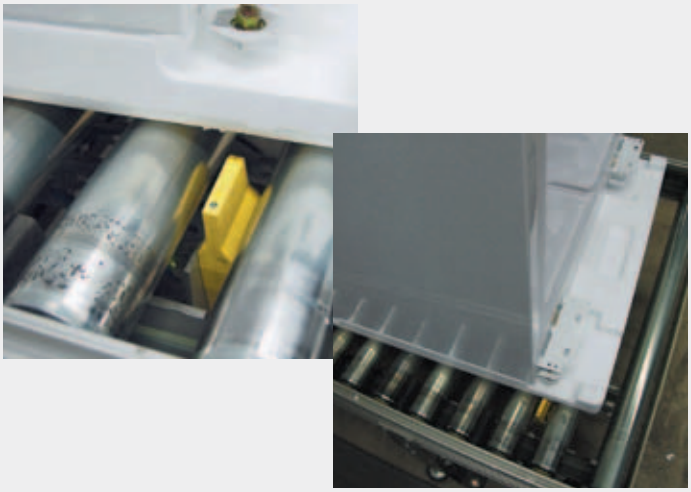
Infrared Light

Functional principle
The transmitter and the receiver are integrated into a single housing and a reflector is required.

Thanks to a special mechanical design developed by wenglor®, these sensors can be mounted between the rollers of a rollers conveyor system.

The sensors function as retro-reflex light barriers. For this reason, the object's colour, shape and surface characteristics have no influence on the sensor's ability to recognise conveyed materials.
The sensors are equipped with control logic for congestion-free and collision-free transport.

Applications
Recognition of objects with less than 6% reflection
Recognition of high-gloss and reflective objects
Recognition of tires



Outputs
PNP and NPN switching outputs, as well as control outputs are available.
A solenoid valve for pneumatic control is integrated in various versions.

Adjustment
No adjustment is necessary.

Features
Sensors for roller conveyors with integrated control logic can be used to activate and deactivate individual accumulation stations within the conveyor system either electrically or pneumatically. The sensors can thus be used to replace mechanical actuating flaps.

Up to 60 sensors for roller conveyors with integrated control logic can be electrically coupled with a plug connector. Electrical power supply is accomplished by means of an OPT114 switching amplifier, or with an adapter plug.

Retro Reflex Sensors

Laser Light (red), Red Light

Functional principle
The transmitter and the receiver are integrated into a single housing and a reflector is required.

If the light beam between the sensor and the reflector is interrupted by an object, the output is switched. Glossy objects such as mirrors, chrome plated or other reflective surfaces can be reliably recognised thanks to the integrated polarisation filter.

Applications
Recognition of objects at great distances
Recognition of objects on conveyor belts
Stack height monitoring
Recognition of glossy objects
Assembly and feed monitoring
Gap monitoring

Outputs
PNP and NPN switching outputs, as well as a contamination output are available.

Adjustment
Adjustments are performed with a potentiometer.

Features
Retro Reflex Sensors with Laser Light
The spot is readily visible - even over great distances - allowing for easy adjustment and initial start-up. Depending upon sensor type, parts as small as 0.25 mm can be reliably recognised over great distances.
These sensors are capable of recognising crystal clear and transparent objects.

Retro Reflex Sensors with Red Light
Thanks to their visible light spot, these sensors are quite easy to adjust and making initial start-up very simple.

Retro Reflex Sensors for the Clear Glass Recognition

Red Light, Infrared Light

Functional principle
The transmitter and the receiver are integrated into a single housing and a reflector is required.

The sensors allow for reliable recognition of clear glass and transparent objects.

If the light beam between the sensor and the reflector is interrupted by an object, the output is switched. Glossy objects such as mirrors, chrome plated or other reflective surfaces can be reliably recognised thanks to the integrated polarisation filter.

Applications
Recognition of crystal clear objects
Recognition of PET and glass bottles
Recognition of transparent sheet products
Recognition of all types of objects
Recognition of small parts
Counting of glass objects

Outputs
PNP and NPN switching outputs, as well as a contamination output and an RS-232 interface are available.

Interface
Sensor functions can be activated and scanning results can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed with a potentiometer. With Teach-In versions, adjustments are made with the appropriate keys, externally or via the RS-232 interface.

Through-Beam Sensors

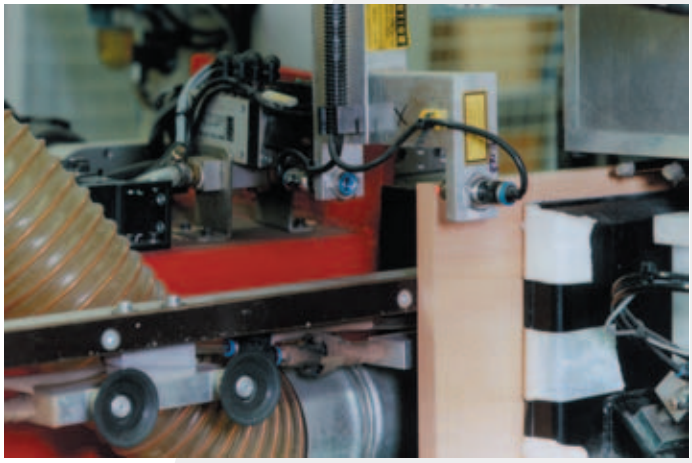
Laser Light (red), Rotl Light, Infrared Light

Functional principle
The transmitter and the receiver are enclosed in separate housings.

The transmitter and the receiver are mounted such that the light beam emitted by the transmitter strikes the lens at the receiver. If the active light beam between the transmitter and the receiver is interrupted, the output is switched.

Transmitters are equipped with a test input and can thus be checked for correct functioning.

Applications
Edge recognition
Object counting
Monitoring openings
Drill breakage monitoring
Recognition of extremely small parts



Outputs
PNP and NPN switching outputs, as well as a contamination output and an RS-232 interface are available.

Interface
Sensor functions can be activated, and scanning results can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed with a potentiometer. With Teach-In variants, adjustments are made with the appropriate keys, externally or via the RS-232 interface.

Features
Through-Beam Sensors with Laser Light
The spot is readily visible - even over great distances - allowing for easy adjustment and initial start-up.
The use of a very fine light beam ensures a small diameter spot, thus enabling the recognition of extremely small parts.

Adjustable focal point
ZD600__ / ZW600__ / YO99__
These Through-Beam Sensors with laser light are equipped with an adjustable focal point. This allows for easy adjustment to any application without auxiliary devices such as apertures.

Through-Beam Sensors with Red Light
Thanks to their visible red spot, these sensors are quite easy to adjust, making initial start-up very simple.

Through-Beam Sensors with Infrared Light
These sensors have an invisible spot. However, infrared light is better able to penetrate contamination or objects, e.g. for the recognition of objects inside paper bags.

EA250 / SA250
These Through-Beam Sensors are designed for use in combination with the wenglor® LV250 Through-Beam Sensor controller. Ample functional reserves assure reliable operation, even in extremely contaminated environments. Use of the wenglor® controller rules out any possible interactive influence, which may otherwise occur in set-ups with several pairs of Through-Beam Sensors.

Universal Through-Beam Sensors

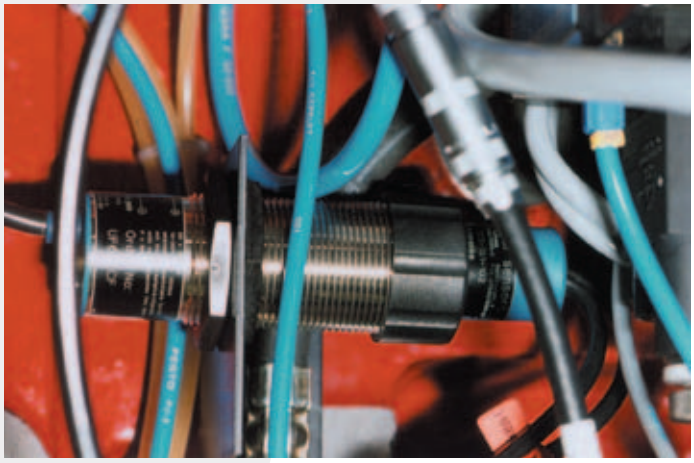
Infrared Light

Functional principle
The transmitter and the receiver are enclosed in separate housing.

The transmitter and the receiver are mounted such that the light beam emitted by the transmitter strikes the lens at the receiver. If the active light beam between the transmitter and the receiver is interrupted, the output is switched.

These sensors are equipped for use with Glass Fibre Optic Cable. They can be used with or without glass fibre-optic cable. The use of Fibre Optic Cable is especially advantageous at difficult to access locations and in high temperature zones of up to 300° C, as well as in applications with limited space availability.

Applications
Object recognition
Edge detection
Use in high temperature zones of up to 300° C
Applications with limited space availability
Recognition of objects inside packages



Outputs
PNP and NPN switching outputs, as well as a contamination output and an RS 232 interface are availabele.

Adjustment
Adjustments are performed with a potentiometer.

Fork Sensors

Laser Light (red)

Functional principle
The transmitter and the receiver are integrated into a single housing as a light barrier.
If the light beam between the transmitter and the receiver is interrupted, the output is switched.

Thanks to the use of visible laser light, the sensor is very easy to align to the object. The use of a fine light beam ensures a small diameter spot over the entire width of the fork. This allows for the recognition of extremely small parts, holes, slots and notches.

Applications
Feed control
Sorting of extremely small parts
Recognition of slots, holes and notches
Gap monitoring
Joint inspection

Outputs
PNP and NPN switching outputs are available.

Adjustment
Adjustments are performed with the Teach-In keys or a rotary selection switch.

Colour Sensors

White Light

Functional principle
The white light source and receiver optics are integrated into a single housing, or enclosed in two separate housings.

The sensors are capable of recognising previously defined colours. These include colours of transparent objects and liquids in the through-beam operating mode, as well as colours of surfaces in reflex mode operation.

The various colour sensors are differentiated by configuration and type of utilised white light source.

Applications
Function test for LEDs
Sorting coloured objects
Sorting beverage cases
Recognition of coloured bottles and liquids
Monitoring of
- degree of ripeness for fruits
- colour codes on wires

Outputs
PNP and NPN switching outputs, as well as an error output, analogue outputs and an RS-232 interface are available.

Interface
Sensor functions can be activated, and measuring results and current colour data (RGB values) can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed with a potentiometer. With Teach-In versions, adjustments are made with the appropriate keys, externally or via the RS-232 interface.

Features
FD01 Colour Sensor with External Illumination
This complete family of colour sensors features modular design characteristics, and can thus be ideally adapted to any application. Various distances from the sensor to the object, as well as different spot sizes, are made possible with the help of additional optics and Glass Fibre Optic Cable. The use of Glass Fibre Optic Cable is also recommended for difficult to access locations and in high temperature zones of up to 300° C. Reflex and through-beam operation are both possible. The sensor generates three different output voltages within a range of 0 to 10 V DC depending upon colour and brightness. These three voltages can be evaluated by an PLC, appropriate PC software provided by the user or the wenglor® FN evaluations units module.

FN01 Evaluation Unit
The FD01 colour sensor can be connected to the wenglor® FN01 evaluation unit. The colour to be recognised is selected with a potentiometer. Window width and hysteresis are adjustable as well.
If several colours need to be recognised, a separate wenglor® FN01 analysis module is required for each.

FN04 Evaluation Unit
The wenglor® FN04 evaluation unit can evaluate up to four colours simultaneously. Colours to be recognised are selected by pressing a key in the Teach-In operating mode. Up to four evaluation units can be utilised with a single FD01 colour sensor. Trigger mode operation is also possible.

FP04 Colour Sensor
The wenglor® FP04 colour sensor is capable of evaluating up to three colours simultaneously. A small spot and a large working range are made possible thanks to single-lens optics. All settings can be acquired digitally via the RS-232 interface and all values can be read out digitally via the RS-232 interface: The sensor is capable of reading out RGB colour values via the interface.

FP11 Colour Sensor
In addition to the functions included with the FP04 colour sensor, this device is provided with a larger spot diameter. The sensor can also be operated in the through-beam mode in combination with a reflector.

Line Sensors

Functional principle
The receiver is enclosed in a housing, and an external light source is required.

The sensors are equipped with a CCD array including 2000 individual light sensitive photovoltaic cells which measure the brightness of the object and compare results with internal setpoint characteristics.

Applications
Diameter measurement
Thickness measurement
Concentricity measurement
Welding seam inspection
Gap measurement
Web edge controls
Turbidity measurement, counting function
Quantity monitoring
Recognition of cracks and fissures

Outputs
A PNP switching output, as well as an analogue output and an RS 232 interface are included.

Interface
Sensor functions can be activated, and scanning results can be acquired via the RS-232 interface.

Adjustment
Adjustments are performed at a PC with menu-driven software.

Features
Width Measurement
The width of an object can be measured in the width measurement operating mode. The switching output is activated when the width of the object lies within a freely adjustable tolerance range. The sensor is thus capable of Go / No-Go parts testing without the use of any additional electronics. The voltage at the sensor's analogue output is proportional to the number of pixels whose brightness values either exceed or fall short of the selected thresholds (object width).

Position Measurement
The position of an object relative to a freely selectable reference point can be measured in the position measurement operating mode. The switching output is activated when the position of the object lies within a freely adjustable tolerance range. The sensor is thus capable of Go / No-Go parts testing without the use of any additional electronics. The voltage at the sensor's analogue output is proportional to the distance between the reference point (left edge limit) and the object's closest edge. The error output is activated if no object is situated within the scanning range.

Counting Function
The sensor is capable of counting objects in the counting function operating mode. A progressive series of degrees of brightness can also be defined as an object (e.g. colour bands or shades). The switching output is activated when the number of counted objects lies within a freely adjustable tolerance range. The sensor can monitor the number of counted objects without any additional electronics. The analogue output voltage is proportional to the number of positive edges which exceed the upper threshold. Analogue output voltage is equal to 100 mV per edge.

Contour Monitoring
The sensor is capable of monitoring the object's brightness characteristics in the contour monitoring operating mode. The switching output is activated when the actual value deviates from specified brightness characteristics. The analogue output is inactive in this operating mode.

Analogue Evaluation Unit

Functional principle
This device is used to process analogue output voltages from wenglor® diffuse reflex sensors for distance measurement. An electrical voltage is read out from the sensor's analogue output. This is converted to a distance value by the AW01 evaluation unit. The distance value is read out via the analogue output at the AW01 and defines the distance between the object and the sensor.

Three different modes of operation can be selected: height, thickness and differential measurement.

Applications
For all applications by means of which distance, thickness and height are measured with analogue diffuse reflex sensors.

Setpoint and actual value comparisons can be evaluated as well and Go/No-Go signals can be read out via the output.

Outputs
One analogue output, one PNP switching output and one error output are included.

Adjustment
All required adjustments are easily performed via the menu display on the LCD.

Power Pack for Sensors with Adjustable On and Off-Delay

Functional principle
This power pack is suitable for connection to a proximity switch, e.g. photoelectronic and inductive sensors. Line voltage is converted to 24 V DC and rectified by means of a buffer transformer. The sensor can be connected to the 24 V DC output voltage. A sensor with either a PNP or an NPN switching output can be connected. A floating relay contact is included as an output, which can be configured with on as well as off-delay.

Outputs
Floating relay output

Adjustment
On and off-delay are adjusted by means of a slide switch or a potentiometer.