

WT190T: The convenient, reliable proximity switch – precisely the right one for challenging applications



Equipment parameterization at the push of a button:

The scanners can be programmed conveniently via the selection mode and consequently aligned ideally for the application. When the situation requires it, a timer function can be activated with a time delay up to 10 seconds.

Display: Menu prompting is via the easily readable display. The compact, industrial standard ABS plastic housing makes it possible to use the equipment even in difficult environmental conditions.

The 4-pin M8 equipment plug or the 2m cable are standard equipment in the same way as the 200 Hz switching frequency.

The performance range of the WT190T can be used meaningfully in the following fields:

- Packaging industry,
- Electronics industry,
- Handling/robotic systems,
- Special-purposes construction machine.



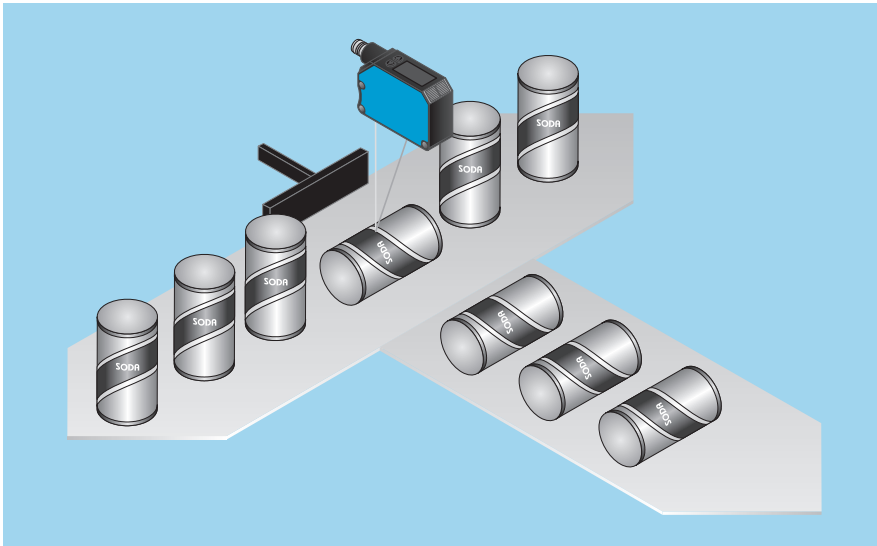
The most important market requirements for photoelectric proximity switches in demanding applications are economic efficiency, reliability and easy operation.

The WT190T series composed of the photoelectric proximity switch WTB190T with background suppression and the WTV190T with foreground suppression fulfill these requirements. The WT190T stands for innovative technologies for solving multifaceted tasks.

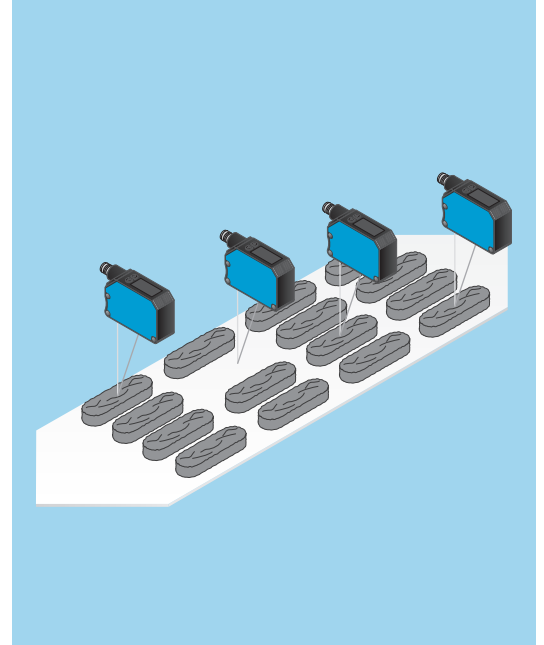
Standard system features:

Red light: The sensors can be aligned optimally and quickly on the object using the visible light spot.

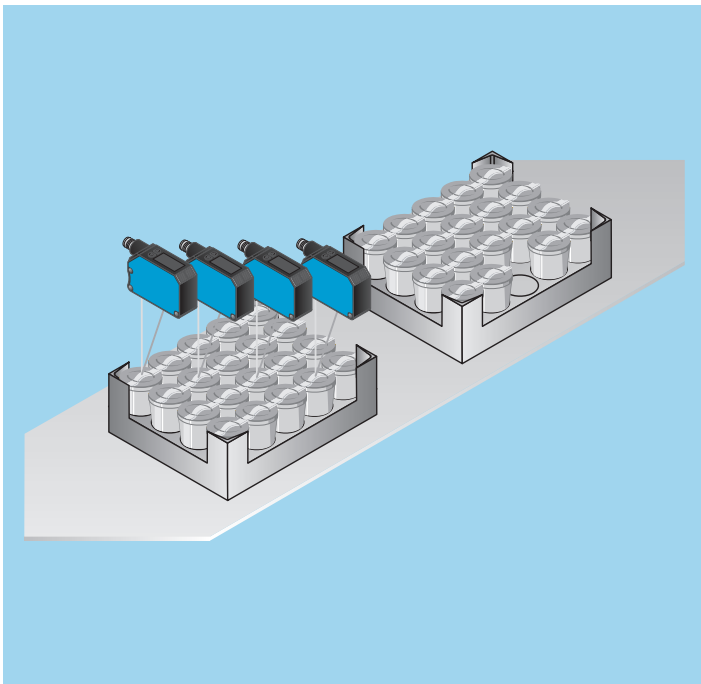
Teach-in procedure at the push of a button or externally: This enables simplified and very effective alignment of equipment.



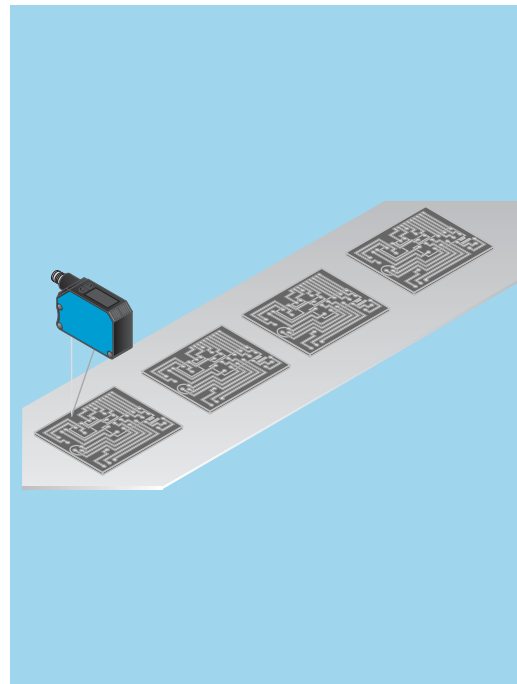
▲ WTV190T: 2-point teach-in, position monitoring of cans. Cans lying on their side are detected and selected. Industry: Packaging technology



▲ WTV190T:
1-point teach-in.
Detection of chocolate
bars on a conveyor
belt. Industry:
Packaging technology

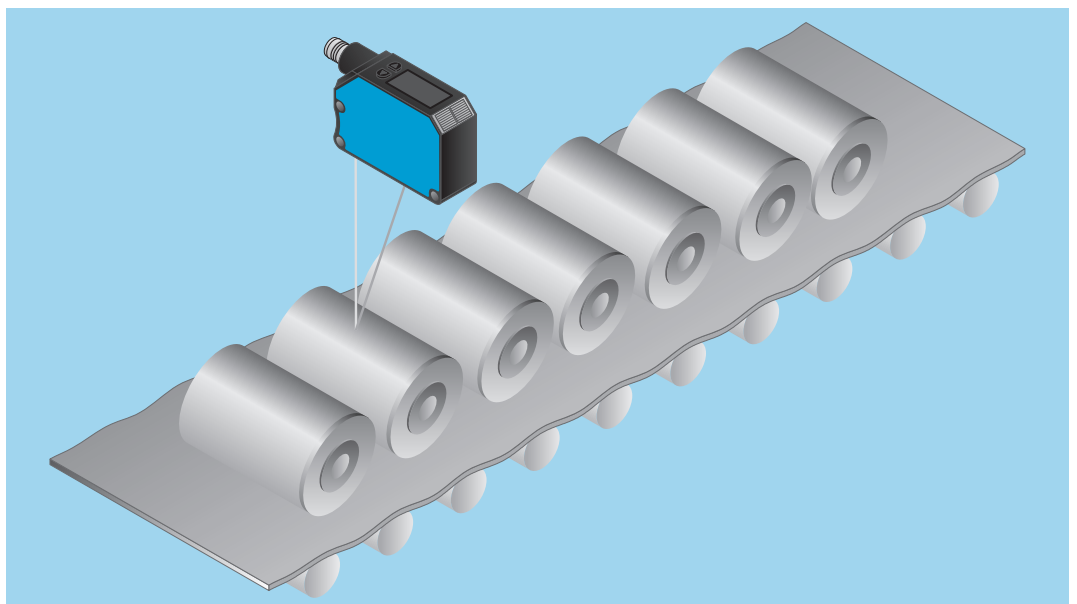


▲ WTB190T: Positioning teach-in checks the completeness of containers. Industry: Packaging technology



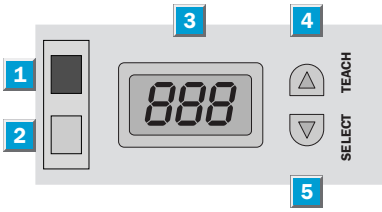
◀ WTB190T:
Positioning E-card
detection. Holes are
suppressed by a
timer function.
Industry: Electronics

► WTB190T: 2-point
teach-in. Workpiece
detection on feeder:
height fluctuations on
conveyor are
compensated for by
"averaged" scanning
distance. Industry:
Assembly/handling



Description of operating panel and functions

Operating panel



- Off
- On (LED orange)
- On (LED green)
- Blinking (LED orange)
- Blinking (LED green)
- Teach-in button
- Select-mode button

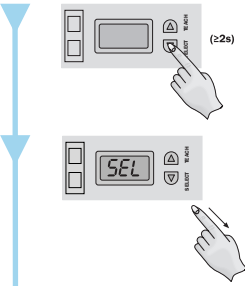
- 1 LED indicator orange: Switching output**
LED on: Output ON; LED off: Output OFF
In RUN Mode: The LED indicator shows the "Open collector" status.
- 2 LED indicator green: Operating reserve**
The LED indicator lights green when there is light reception with reserve or when there is no light reception. It does not light if there is insufficient light reception.
- 3 Numerical display**
Shows the selected parameter or teach-in mode.
- 4 Teach-in button**
Switching level: The LED lights green 1 x when the first distance is set and 2 x when the second distance is set.
- 5 Select-mode button**
For parameterizing the sensor, e.g., switching type/time delay.

Functions

| | | |
|------------------------|--------------------------|----------|
| dLY Delay | oFF Display off | Off |
| Ld light on/dark on | 1Pt 1-point Teach-in | On |
| dPY Display on/off | 2Pt 2-point Teach-in | Blinking |
| nor no Delay | PoS Positioning | |
| ond on Delay | SEL Selection Mode | |
| oFd off Delay | AdJ Adjust Mode | |
| Lon Light on | err Error | |
| don Dark on | FFF Far level adjust | |
| on Display on | nnn Near level adjust | |

Description of operating panel and functions

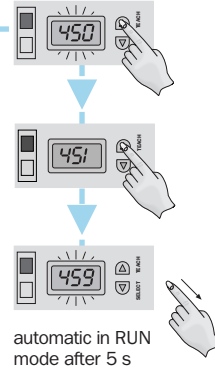
Setting: Mode, near and far level, Timer, L/D, Display



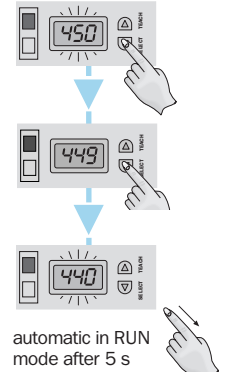
WTV190T 1-point Teach-in
 WTB190T 1-point Teach-in
 WTB190T 2-point Teach-in



Switching distance bigger



Switching distance smaller

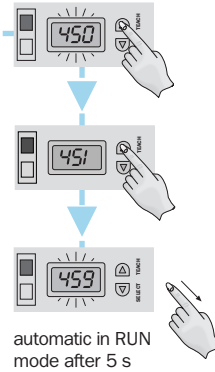


WTV190T 2-point Teach-in

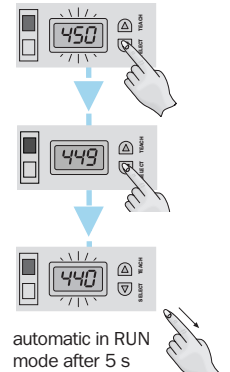
Near level adjust



Switching distance bigger



Switching distance smaller

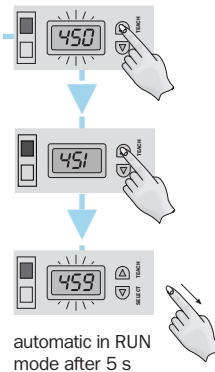


WTV190T 2-point Teach-in

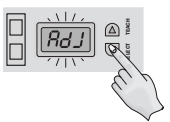
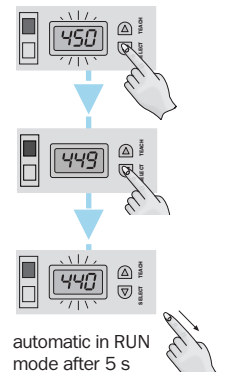
Far level adjust



Switching distance bigger

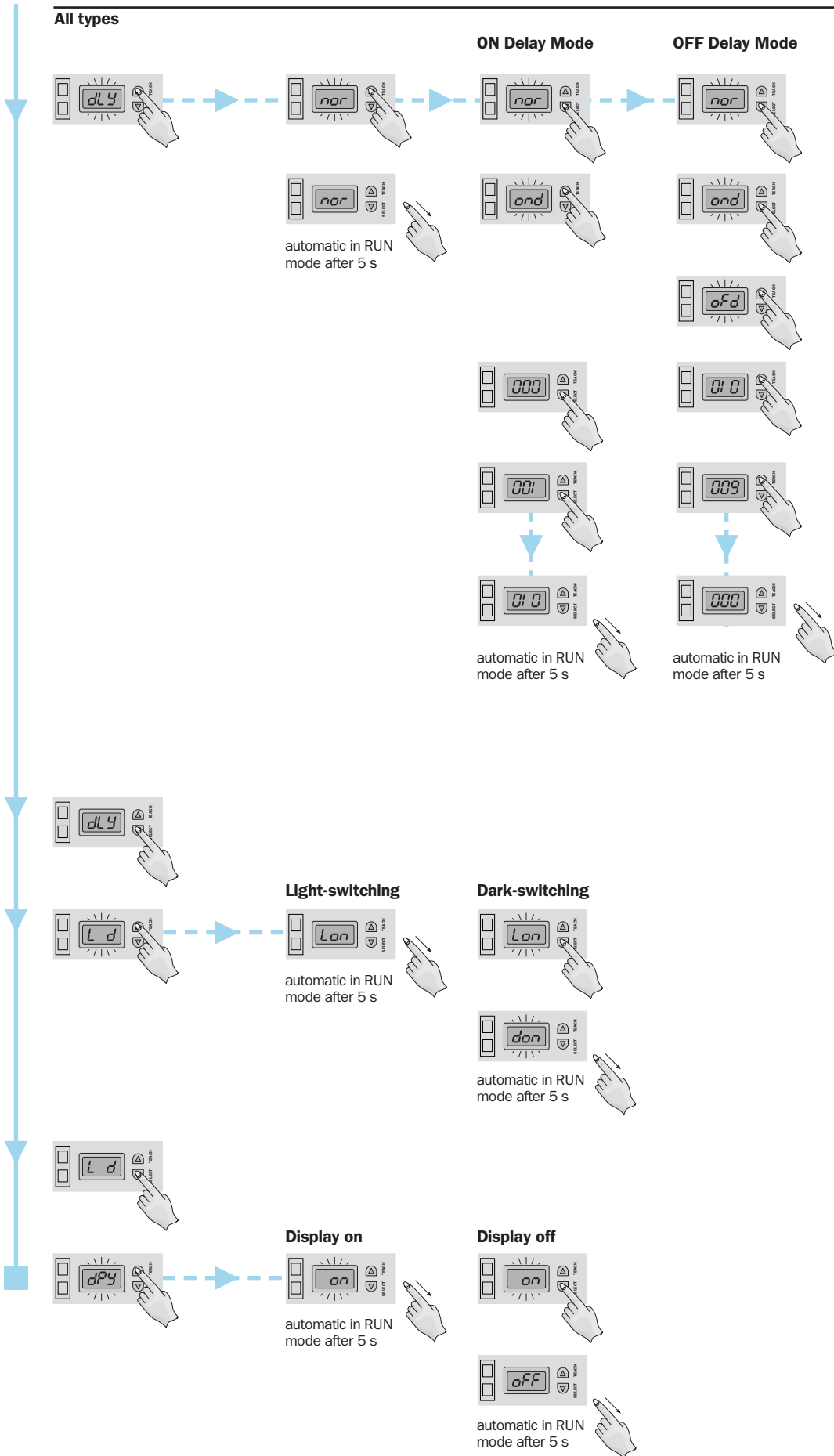


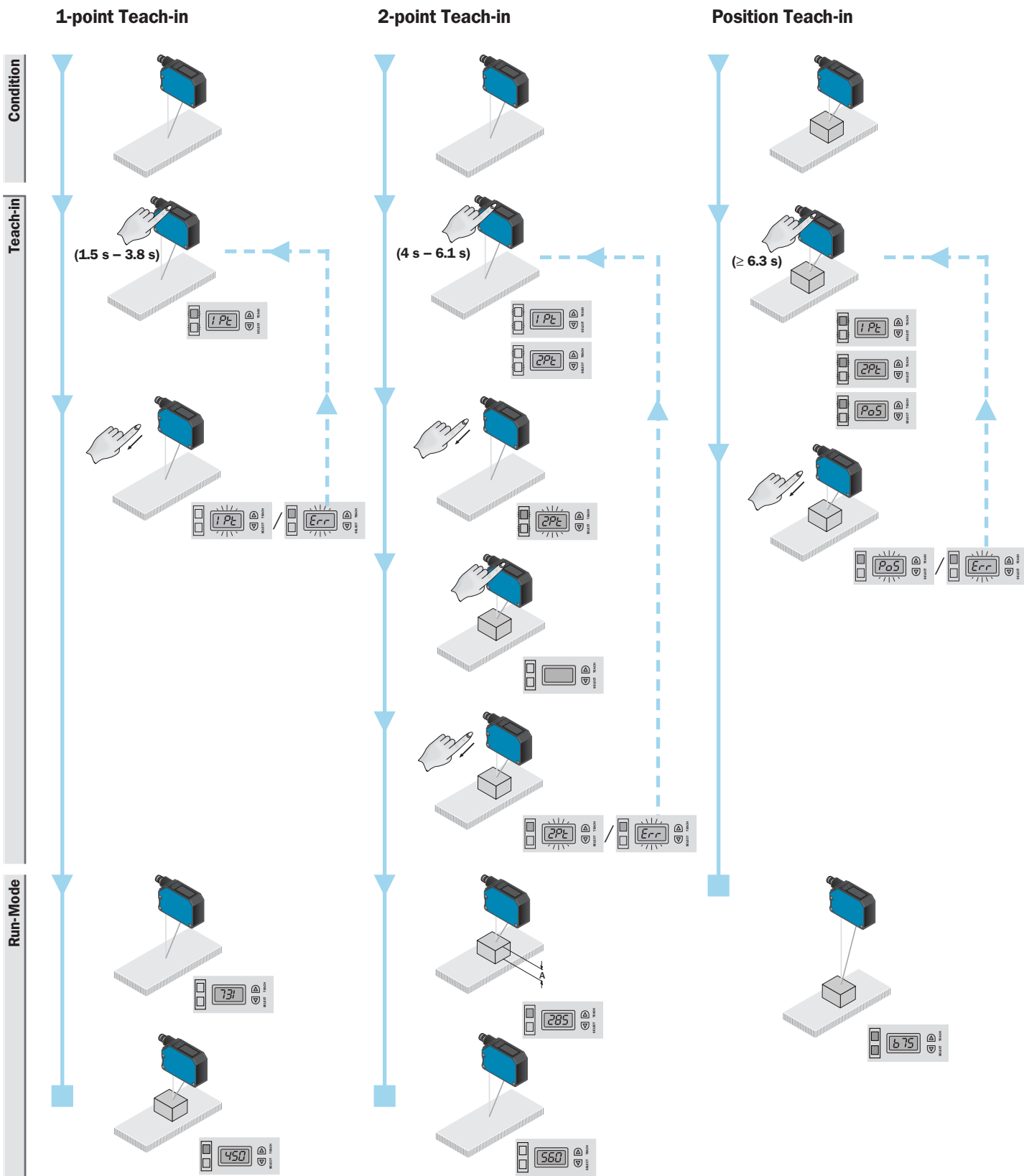
Switching distance smaller



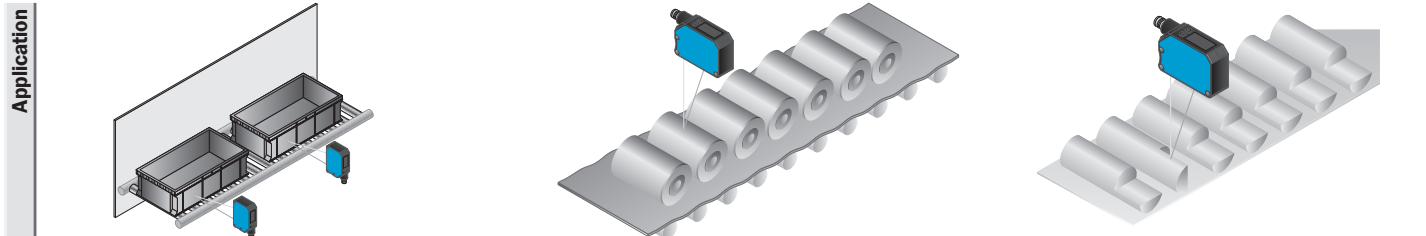
Description of operating panel and functions

Setting: Mode, near and far level, Timer, L/D, Display





Status Background will *just not* be detected. Sensitivity aligned to the centre between the two teach-in points. Object is detected dependent on position.



Condition

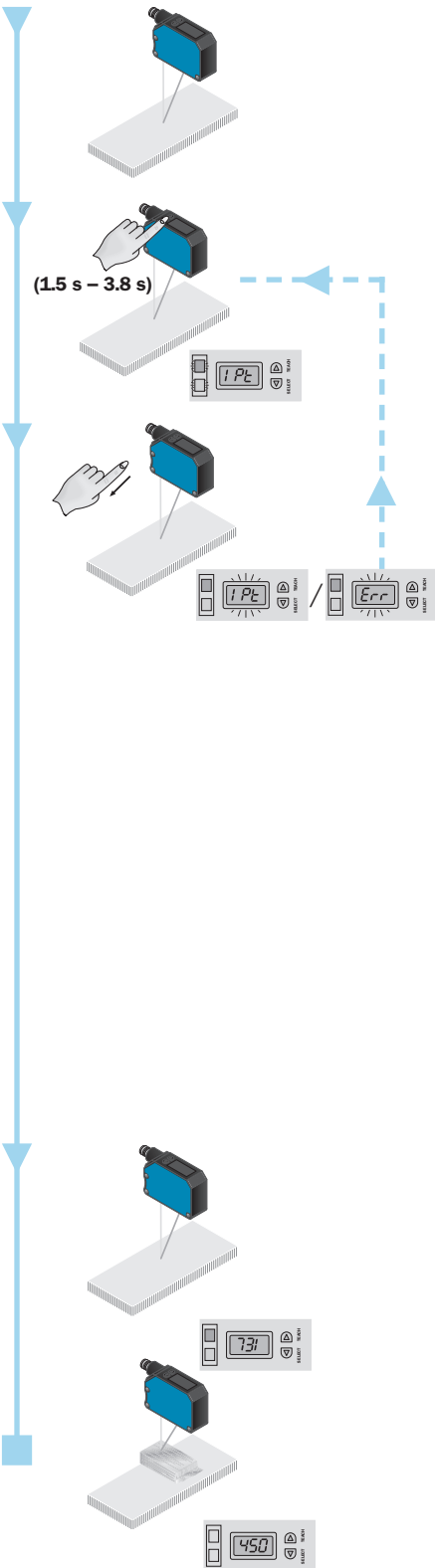
Teach-in

Run Mode

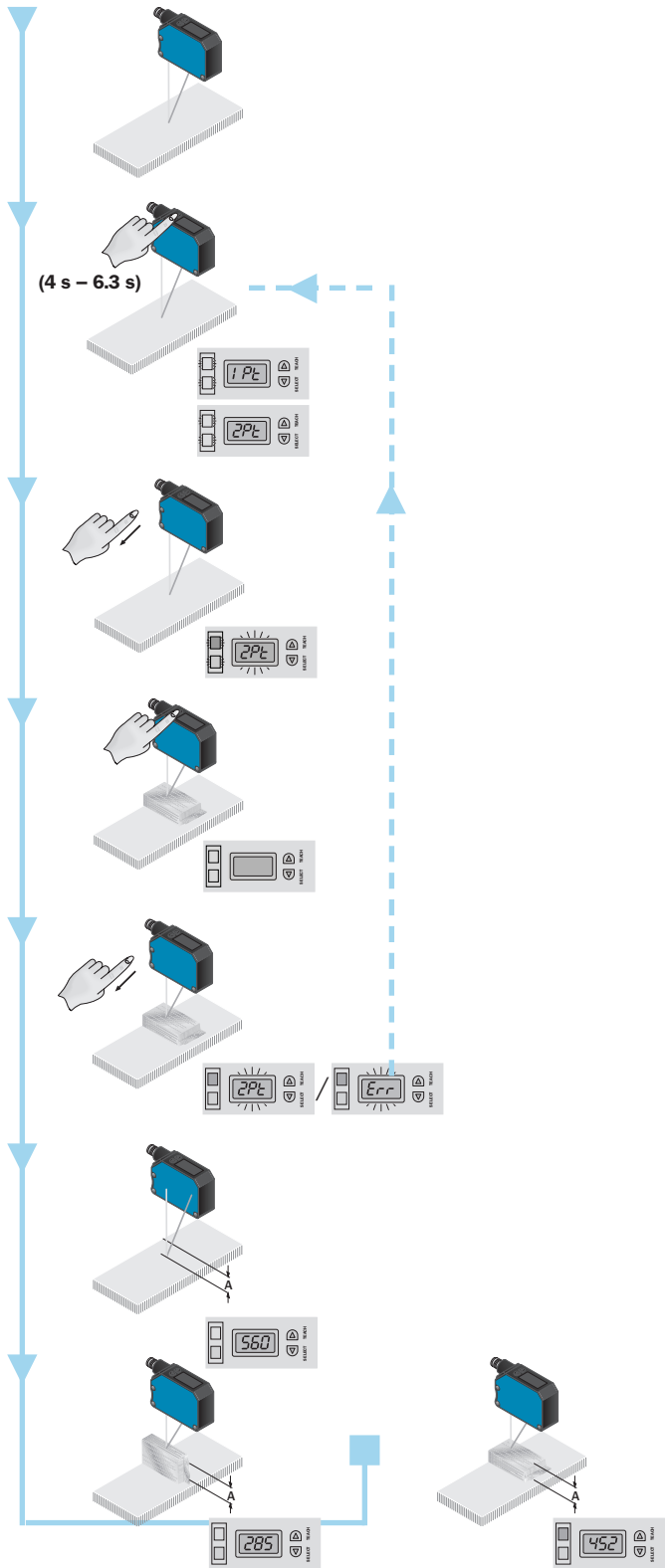
Status

Application

1-point Teach-in

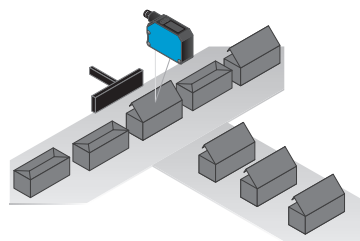
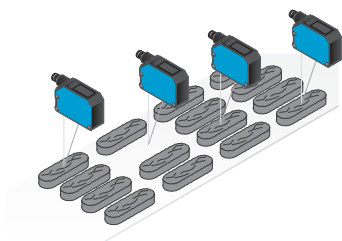


2-point Teach-in



Objects in front of background will be detected

Sensitivity aligned to the centre between the two teach-in points.

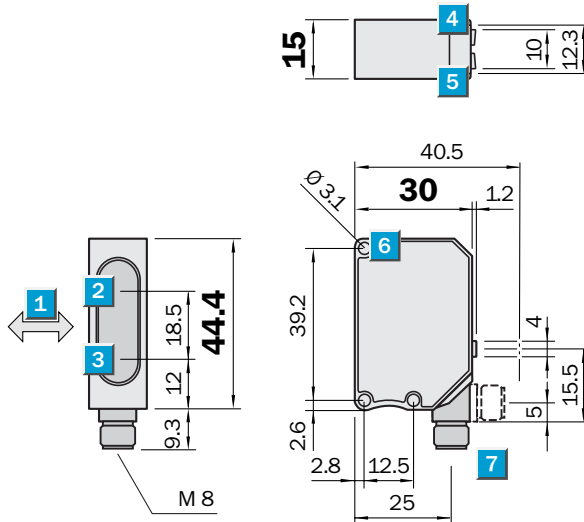


Scanning distance
80 ... 300 mm

Photoelectric proximity switch

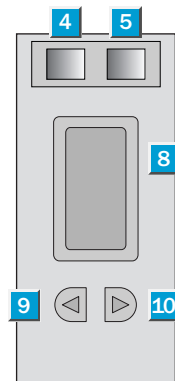
- Precise foreground suppression
- Small light spot enabling fast and precise alignment
- Scanning range setting via Teach-in procedure
- Easily readable display with menu navigation enables convenient programming and parameterization

Dimensional drawing



Adjustments possible

- WTV190T-N162
- WTV190T-N460
- WTV190T-P162
- WTV190T-P460



- 1 Standard direction of the material being scanned
- 2 Centre of optical axis, receiver
- 3 Centre of optical axis, sender
- 4 LED indicator green: output active
- 5 LED indicator orange: light reception with operating reserve > 1.1 or without light reception
- 6 Mounting holes, Ø approx. 3.1 mm
- 7 Connection
- 8 Numerical display
- 9 Select mode button
- 10 Teach-in button

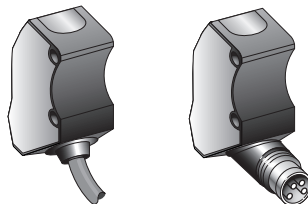
External Teach-in

| Time | Teach mode |
|---------------|------------------|
| 1.5 s - 3.8 s | 1-point teach-in |
| 4 s - 6.3 s | 2-point teach-in |

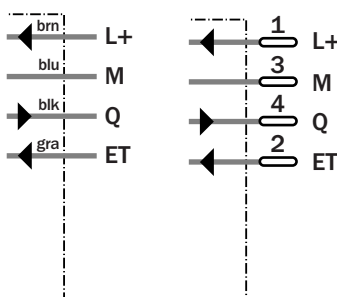


Connection type

| | |
|--------------|--------------|
| WTV190T-N162 | WTV190T-N460 |
| WTV190T-P162 | WTV190T-P460 |



4 x 0.2 mm² M8, 4-pin



Accessories

| |
|----------------------|
| Connector, M8, 4-pin |
| Mounting systems |

| Technical specifications | | WTV190T- | N162 | N460 | P162 | P460 | | | | | | | |
|-----------------------------------|---|----------|------|------|------|------|--|--|--|--|--|--|--|
| Scanning distance typ. max. | 80 ... 300 mm ¹⁾ | | | | | | | | | | | | |
| Operating distance | 100 ... 300 mm ¹⁾ | | | | | | | | | | | | |
| Adjustment of operating distance | Teach-in: teach button & cable (ET) ²⁾ | | | | | | | | | | | | |
| Light source, light type | LED, Red light, 680 nm ³⁾ | | | | | | | | | | | | |
| Light spot diameter | 11 mm at distance of 300 mm | | | | | | | | | | | | |
| Supply voltage V _s | DC 10 ... 30 V ⁴⁾ | | | | | | | | | | | | |
| Ripple | ± 10 % ⁵⁾ | | | | | | | | | | | | |
| Power consumption | 60 mA ⁶⁾ | | | | | | | | | | | | |
| Switching outputs | NPN: open collector: Q PNP: open collector: Q | | | | | | | | | | | | |
| Switching mode | Light/dark-switching, programmable | | | | | | | | | | | | |
| Signal voltage PNP HIGH / LOW | V _s - 1.8 V / approx. 0 V | | | | | | | | | | | | |
| Signal voltage NPN HIGH / LOW | Approx. V _s / < 1.8 V | | | | | | | | | | | | |
| Output current I _a max | 100 mA | | | | | | | | | | | | |
| Response time | 2.5 ms ⁷⁾ | | | | | | | | | | | | |
| Switching frequency | 200 Hz ⁸⁾ | | | | | | | | | | | | |
| Time step | 0...10 s, programmable | | | | | | | | | | | | |
| Time type | Nor: normal Mode Ond: ON Delay Mode OFd: OFF Delay Mode | | | | | | | | | | | | |
| Connection type | Cable, PVC, 2 m ⁹⁾ Connector, M8, 4-pin | | | | | | | | | | | | |
| VDE protection class | ⊕ | | | | | | | | | | | | |
| Circuit protection | V _s connections reverse-polarity protected / In-/outputs short-circuit protected / Interference pulse suppression / Outputs overcurrent and short-circuit protected | | | | | | | | | | | | |
| Enclosure rating | IP 67 | | | | | | | | | | | | |
| Ambient temperature operation | -25 °C ... +55 °C | | | | | | | | | | | | |
| Ambient temperature storage | -40 °C ... +70 °C | | | | | | | | | | | | |
| Weight | Ca. 66 g Ca. 18 g | | | | | | | | | | | | |
| Housing material | ABS / PMMA | | | | | | | | | | | | |

¹⁾ Object with 90% remission (based on standard white to DIN 5033)

²⁾ PNP: control wire > 7 V
NPN: control wire < 1.5 V

³⁾ Average service life 100,000 h at T_a = +25 °C

⁴⁾ Limit values, operation in short-circuit protected network max. 8 A

⁵⁾ May not exceed or fall short of V_s tolerances

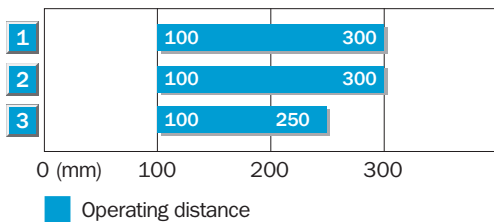
⁶⁾ Without load

⁷⁾ Signal transit time with resistive load

⁸⁾ With light/dark ratio 1:1

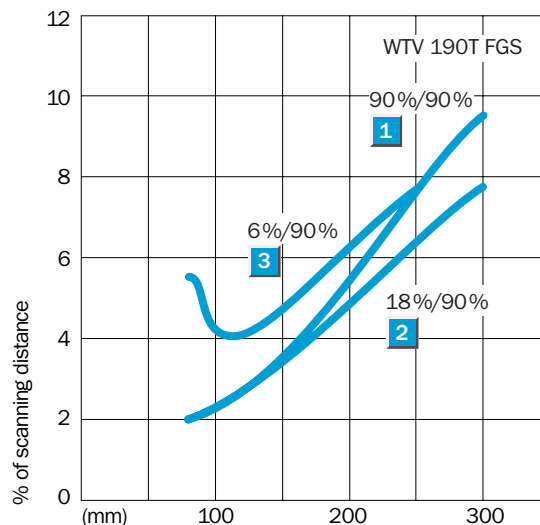
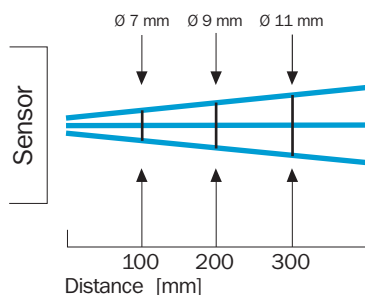
⁹⁾ Do not bend below 0 °C

Operating distance



- 1 Scanning range on white, 90 % remission
- 2 Scanning range on grey, 18 % remission
- 3 Scanning range on black, 6 % remission

Light spot diameter



Ordering information

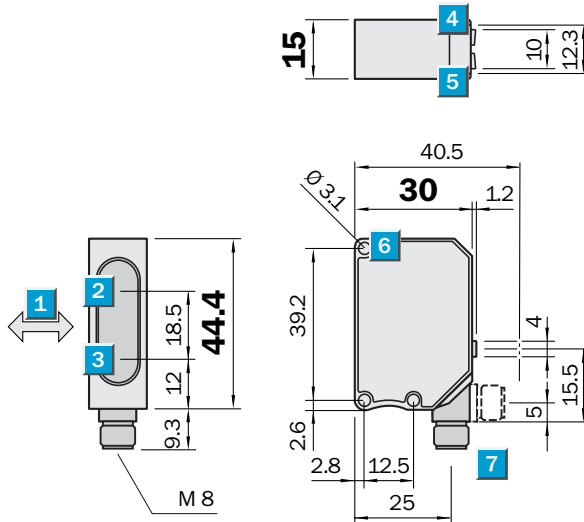
| Type | Order No. |
|--------------|-----------|
| WTV190T-N162 | 6 022 855 |
| WTV190T-N460 | 6 022 858 |
| WTV190T-P162 | 6 022 859 |
| WTV190T-P460 | 6 022 862 |

Scanning distance
30 ... 100 mm

Photoelectric proximity switch

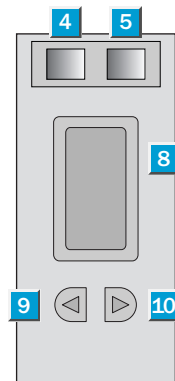
- Precise foreground suppression
- Small light spot enabling fast and precise alignment
- Scanning range setting via Teach-in procedure
- Easily readable display with menu navigation enables convenient programming and parameterization

Dimensional drawing



Adjustments possible

- WTV190T-N132
- WTV190T-N430
- WTV190T-P132
- WTV190T-P430



- 1 Standard direction of the material being scanned
- 2 Centre of optical axis, receiver
- 3 Centre of optical axis, sender
- 4 LED indicator green: output active
- 5 LED indicator orange: light reception with operating reserve > 1.1 or without light reception
- 6 Mounting holes, Ø approx. 3.1 mm
- 7 Connection
- 8 Numerical display
- 9 Select mode button
- 10 Teach-in button

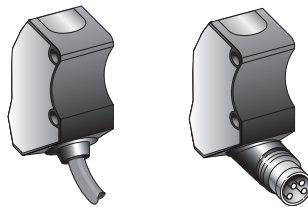
External Teach-in

| Time | Teach mode |
|---------------|------------------|
| 1.5 s - 3.8 s | 1-point teach-in |
| 4 s - 6.3 s | 2-point teach-in |

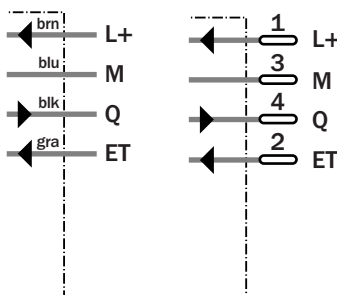


Connection type

| | |
|--------------|--------------|
| WTV190T-N132 | WTV190T-N430 |
| WTV190T-P132 | WTV190T-P430 |



4 x 0.2 mm² | M8, 4-pin



Accessories

| |
|----------------------|
| Connector, M8, 4-pin |
| Mounting systems |

| Technical specifications | | WTV190T- | N132 | N430 | P132 | P430 | | | | | | | |
|-----------------------------------|--|----------|------|------|------|------|--|--|--|--|--|--|--|
| Scanning distance typ. max. | 30 ... 100 mm ¹⁾ | | | | | | | | | | | | |
| Operating distance | 50 ... 100 mm ¹⁾ | | | | | | | | | | | | |
| Adjustment of operating distance | Teach-in: teach button & cable (ET) ²⁾ | | | | | | | | | | | | |
| Light source, light type | LED, Red light, 680 nm ³⁾ | | | | | | | | | | | | |
| Light spot diameter | 4 mm at distance of 100 mm | | | | | | | | | | | | |
| Supply voltage V _s | DC 10 ... 30 V ⁴⁾ | | | | | | | | | | | | |
| Ripple | ± 10 % ⁵⁾ | | | | | | | | | | | | |
| Power consumption | 60 mA ⁶⁾ | | | | | | | | | | | | |
| Switching outputs | NPN: open collector: Q PNP: open collector: Q | | | | | | | | | | | | |
| Switching mode | Light/dark-switching, programmable | | | | | | | | | | | | |
| Signal voltage PNP HIGH / LOW | V _s - 1.8 V / approx. 0 V | | | | | | | | | | | | |
| Signal voltage NPN HIGH / LOW | Approx. V _s / < 1.8 V | | | | | | | | | | | | |
| Output current I _a max | 100 mA | | | | | | | | | | | | |
| Response time | 2.5 ms ⁷⁾ | | | | | | | | | | | | |
| Switching frequency | 200 Hz ⁸⁾ | | | | | | | | | | | | |
| Time step | 0...10 s, programmable | | | | | | | | | | | | |
| Time type | Nor: normal Mode Ond: ON Delay Mode OFd: OFF Delay Mode | | | | | | | | | | | | |
| Connection type | Cable, PVC, 2 m ⁹⁾ Connector, M8, 4-pin | | | | | | | | | | | | |
| VDE protection class | ⊕ | | | | | | | | | | | | |
| Circuit protection | V _s connections reverse-polarity protected / In-/outputs short-circuit protected / Interference pulse suppression / Outputs overcurrent and short-circuit protected | | | | | | | | | | | | |
| Enclosure rating | IP 67 | | | | | | | | | | | | |
| Ambient temperature operation | -25 °C ... +55 °C | | | | | | | | | | | | |
| Ambient temperature storage | -40 °C ... +70 °C | | | | | | | | | | | | |
| Weight | Ca. 66 g Ca. 18 g | | | | | | | | | | | | |
| Housing material | ABS / PMMA | | | | | | | | | | | | |

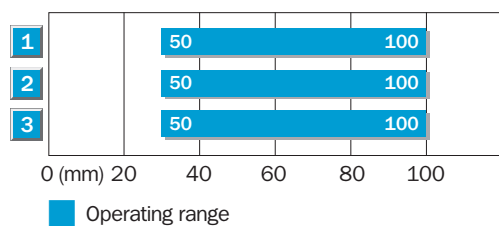
¹⁾ Object with 90% remission (based on standard white to DIN 5033)
²⁾ PNP: control wire > 7 V
NPN: control wire < 1.5 V

³⁾ Average service life 100,000 h at T_a = +25°C
⁴⁾ Limit values, operation in short-circuit protected network max. 8 A

⁵⁾ May not exceed or fall short of V_s tolerances
⁶⁾ Without load
⁷⁾ Signal transit time with resistive load

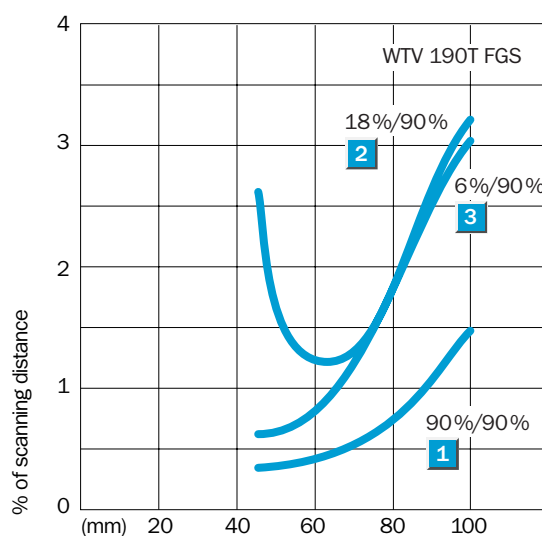
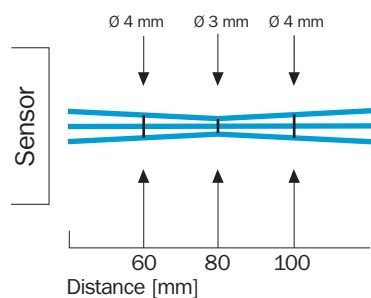
⁸⁾ With light/dark ratio 1:1
⁹⁾ Do not bend below 0 °C

Operating distance



- 1 Scanning range on white, 90 % remission
- 2 Scanning range on grey, 18 % remission
- 3 Scanning range on black, 6 % remission

Light spot diameter



Ordering information

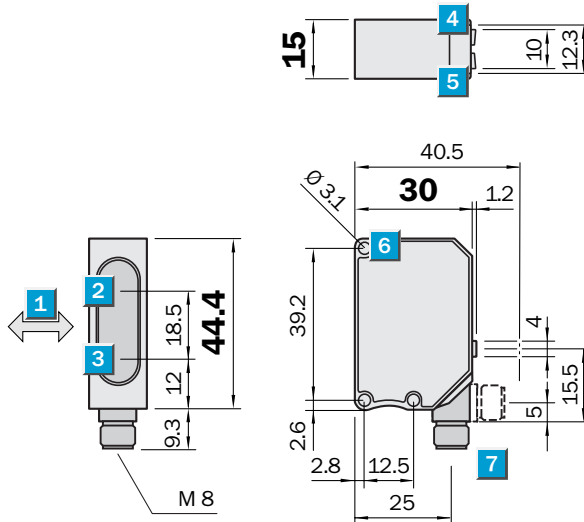
| Type | Order No. |
|--------------|-----------|
| WTV190T-N132 | 6 022 847 |
| WTV190T-N430 | 6 022 850 |
| WTV190T-P132 | 6 022 851 |
| WTV190T-P430 | 6 022 854 |

Scanning distance
80 ... 300 mm

Photoelectric proximity switch

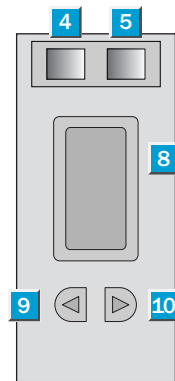
- Precise background suppression
- Small light spot enabling fast and precise alignment
- Scanning range setting via Teach-in procedure
- Easily readable display with menu navigation enables convenient programming and parameterization

Dimensional drawing



Adjustments possible

- WTB190T-N162
- WTB190T-N460
- WTB190T-P162
- WTB190T-P460



- 1 Standard direction of the material being scanned
- 2 Centre of optical axis, receiver
- 3 Centre of optical axis, sender
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- 9 Select mode button
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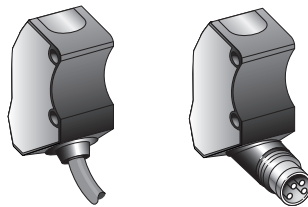
External Teach-in

| Time | Teach mode |
|---------------|-------------------|
| 1.5 s - 3.8 s | 1-point teach-in |
| 4 s - 6.1 s | 2-point teach-in |
| >6.3 s | Position teach-in |

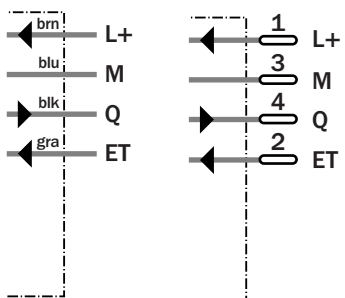


Connection type

| | |
|--------------|--------------|
| WTB190T-N162 | WTB190T-N460 |
| WTB190T-P162 | WTB190T-P460 |



4 x 0.2 mm² M8, 4-pin



Accessories

| |
|----------------------|
| Connector, M8, 4-pin |
| Mounting systems |

| Technical specifications | | WTB190T- | N162 | N460 | P162 | P460 | | | | | | |
|-----------------------------------|--|----------|------|------|------|------|--|--|--|--|--|--|
| Scanning distance typ. max. | 80 ... 300 mm ¹⁾ | | | | | | | | | | | |
| Operating distance | 100 ... 300 mm ¹⁾ | | | | | | | | | | | |
| Adjustment of operating distance | Teach-in: teach button & cable (ET) ²⁾ | | | | | | | | | | | |
| Light source, light type | LED, Red light, 680 nm ³⁾ | | | | | | | | | | | |
| Light spot diameter | 11 mm at distance of 300 mm | | | | | | | | | | | |
| Supply voltage V _s | DC 10 ... 30 V ⁴⁾ | | | | | | | | | | | |
| Ripple | ± 10 % ⁵⁾ | | | | | | | | | | | |
| Power consumption | ≤60 mA ⁶⁾ | | | | | | | | | | | |
| Switching outputs | NPN: open collector: Q PNP: open collector: Q | | | | | | | | | | | |
| Switching mode | Light/dark-switching, programmable | | | | | | | | | | | |
| Signal voltage PNP HIGH / LOW | V _s - 1.8 V / approx. 0 V | | | | | | | | | | | |
| Signal voltage NPN HIGH / LOW | Approx. V _s / < 1.8 V | | | | | | | | | | | |
| Output current I _a max | 100 mA | | | | | | | | | | | |
| Response time | 2.5 ms ⁷⁾ | | | | | | | | | | | |
| Switching frequency | 200 Hz ⁸⁾ | | | | | | | | | | | |
| Time step | 0...10 s, programmable | | | | | | | | | | | |
| Time type | Nor: normal Mode Ond: ON Delay Mode OFd: OFF Delay Mode | | | | | | | | | | | |
| Connection type | Cable, PVC, 2 m ⁹⁾ | | | | | | | | | | | |
| | Connector, M8, 4-pin | | | | | | | | | | | |
| VDE protection class | ⊕ | | | | | | | | | | | |
| Circuit protection | V _s connections reverse-polarity protected / In-/outputs short-circuit protected / Interference pulse suppression / Outputs overcurrent and short-circuit protected | | | | | | | | | | | |
| Enclosure rating | IP 67 | | | | | | | | | | | |
| Ambient temperature operation | -25 °C ... +55 °C | | | | | | | | | | | |
| Ambient temperature storage | -40 °C ... +70 °C | | | | | | | | | | | |
| Weight | Ca. 66 g Ca. 18 g | | | | | | | | | | | |
| Housing material | ABS / PMMA | | | | | | | | | | | |

¹⁾ Object with 90% remission (based on standard white to DIN 5033)

²⁾ PNP: control wire > 7 V
NPN: control wire < 1.5 V

³⁾ Average service life 100,000 h at T_a = +25°C

⁴⁾ Limit values, operation in short-circuit protected network max. 8 A

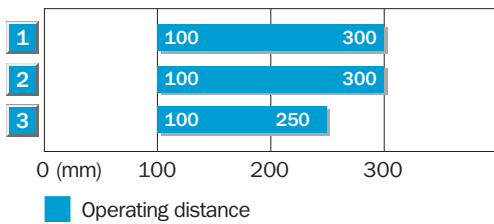
⁵⁾ May not exceed or fall short of V_s tolerances

⁶⁾ Without load

⁷⁾ Signal transit time with resistive load

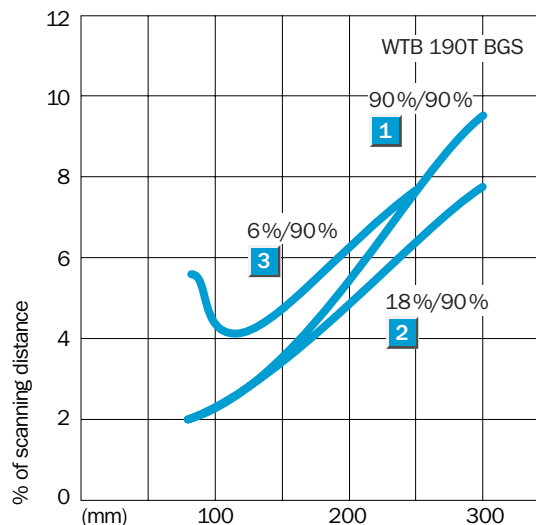
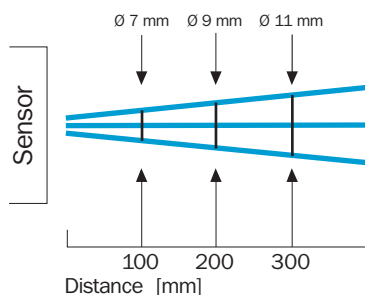
⁸⁾ With light/dark ratio 1:1
⁹⁾ Do not bend below 0 °C

Operating distance



- 1 Scanning range on white, 90 % remission
- 2 Scanning range on grey, 18 % remission
- 3 Scanning range on black, 6 % remission

Light spot diameter



Ordering information

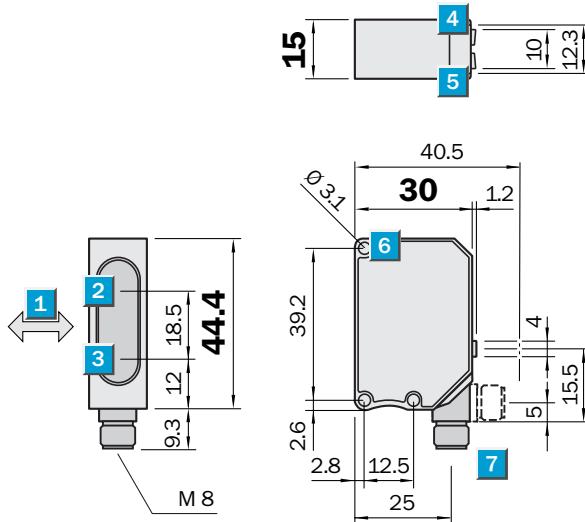
| Type | Order No. |
|--------------|-----------|
| WTB190T-N162 | 6 022 839 |
| WTB190T-N460 | 6 022 842 |
| WTB190T-P162 | 6 022 843 |
| WTB190T-P460 | 6 022 846 |

Scanning distance
30 ... 100 mm

Photoelectric proximity switch

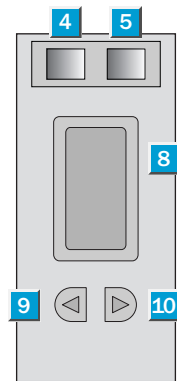
- Precise background suppression
- Small light spot enabling fast and precise alignment
- Scanning range setting via Teach-in procedure
- Easily readable display with menu navigation enables convenient programming and parameterization

Dimensional drawing



Adjustments possible

- WTB190T-N132
- WTB190T-N430
- WTB190T-P132
- WTB190T-P430



- 1 Standard direction of the material being scanned
- 2 Centre of optical axis, receiver
- 3 Centre of optical axis, sender
- 4 LED indicator green: output active
- 5 LED indicator orange: light reception with operating reserve > 1.1 or without light reception
- 6 Mounting holes, Ø approx. 3.1 mm
- 7 Connection
- 8 Numerical display
- 9 Select mode button
- 10 Teach-in button

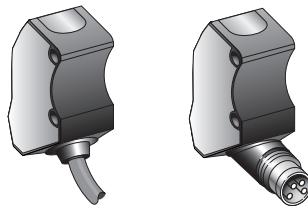
External Teach-in

| Time | Teach mode |
|---------------|-------------------|
| 1.5 s - 3.8 s | 1-point teach-in |
| 4 s - 6.1 s | 2-point teach-in |
| >6.3 s | Position teach-in |

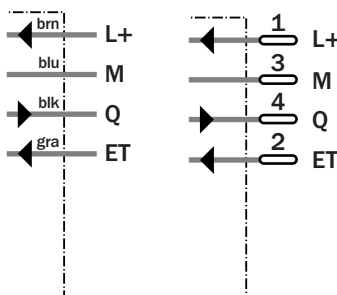


Connection type

| | |
|--------------|--------------|
| WTB190T-N132 | WTB190T-N430 |
| WTB190T-P132 | WTB190T-P430 |



4 x 0.2 mm² M8, 4-pin



Accessories

| |
|----------------------|
| Connector, M8, 4-pin |
| Mounting systems |

| Technical specifications | | WTB190T- | N132 | N430 | P132 | P430 | | | | | | |
|-----------------------------------|--|----------|------|------|------|------|--|--|--|--|--|--|
| Scanning distance typ. max. | 30 ... 100 mm ¹⁾ | | | | | | | | | | | |
| Operating distance | 50 ... 100 mm ¹⁾ | | | | | | | | | | | |
| Adjustment of operating distance | Teach-in: teach button & cable (ET) ²⁾ | | | | | | | | | | | |
| Light source, light type | LED, Red light, 680 nm ³⁾ | | | | | | | | | | | |
| Light spot diameter | 4 mm at distance of 100 mm | | | | | | | | | | | |
| Supply voltage V _s | DC 10 ... 30 V ⁴⁾ | | | | | | | | | | | |
| Ripple | ± 10 % ⁵⁾ | | | | | | | | | | | |
| Power consumption | 60 mA ⁶⁾ | | | | | | | | | | | |
| Switching outputs | NPN: open collector: Q PNP: open collector: Q | | | | | | | | | | | |
| Switching mode | Light/dark-switching, programmable | | | | | | | | | | | |
| Signal voltage PNP HIGH / LOW | V _s - 1.8 V / approx. 0 V | | | | | | | | | | | |
| Signal voltage NPN HIGH / LOW | Approx. V _s / < 1.8 V | | | | | | | | | | | |
| Output current I _a max | 100 mA | | | | | | | | | | | |
| Response time | 2.5 ms ⁷⁾ | | | | | | | | | | | |
| Switching frequency | 200 Hz ⁸⁾ | | | | | | | | | | | |
| Time step | 0...10 s, programmable | | | | | | | | | | | |
| Time type | Nor: normal Mode Ond: ON Delay Mode OFd: OFF Delay Mode | | | | | | | | | | | |
| Connection type | Cable, PVC, 2 m ⁹⁾ | | | | | | | | | | | |
| | Connector, M8, 4-pin | | | | | | | | | | | |
| VDE protection class | ⊕ | | | | | | | | | | | |
| Circuit protection | V _s connections reverse-polarity protected / In-/outputs short-circuit protected / Interference pulse suppression / Outputs overcurrent and short-circuit protected | | | | | | | | | | | |
| Enclosure rating | IP 67 | | | | | | | | | | | |
| Ambient temperature operation | -25 °C ... +55 °C | | | | | | | | | | | |
| Ambient temperature storage | -40 °C ... +70 °C | | | | | | | | | | | |
| Weight | Ca. 66 g Ca. 18 g | | | | | | | | | | | |
| Housing material | ABS / PMMA | | | | | | | | | | | |

¹⁾ Object with 90% remission (based on standard white to DIN 5033)

²⁾ PNP: control wire > 7 V
NPN: control wire < 1.5 V

³⁾ Average service life 100,000 h at T_a = +25°C

⁴⁾ Limit values, operation in short-circuit protected network max. 8 A

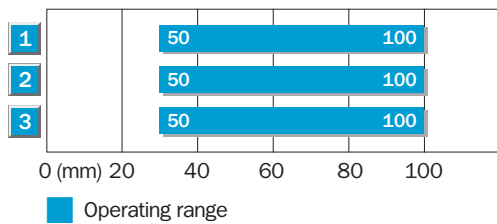
⁵⁾ May not exceed or fall short of V_s tolerances

⁶⁾ Without load

⁷⁾ Signal transit time with resistive load

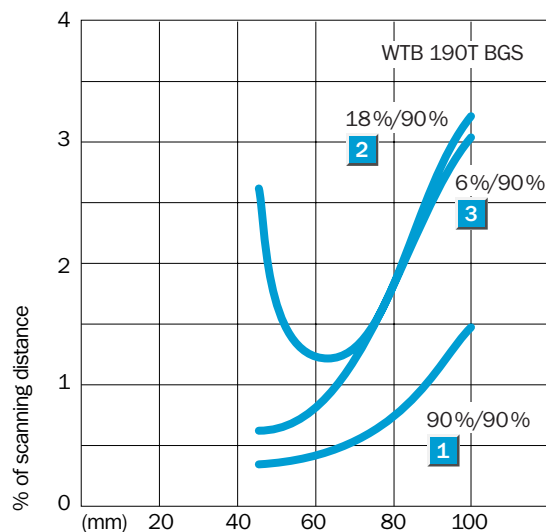
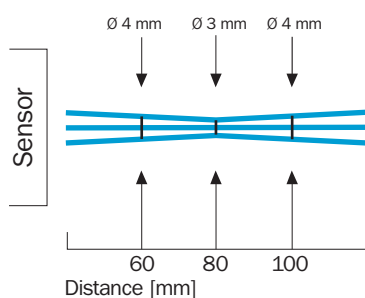
⁸⁾ With light/dark ratio 1:1
⁹⁾ Do not bend below 0 °C

Operating distance



- 1 Scanning range on white, 90 % remission
- 2 Scanning range on grey, 18 % remission
- 3 Scanning range on black, 6 % remission

Light spot diameter



Ordering information

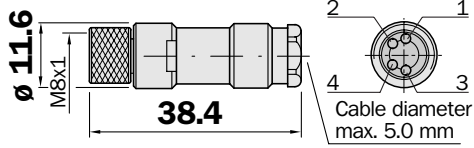
| Type | Order No. |
|--------------|-----------|
| WTB190T-N132 | 6 022 831 |
| WTB190T-N430 | 6 022 834 |
| WTB190T-P132 | 6 022 835 |
| WTB190T-P430 | 6 022 838 |

Dimensional drawings and order information

SENSICK screw-in system M8, 4-pin, enclosure rating IP 67

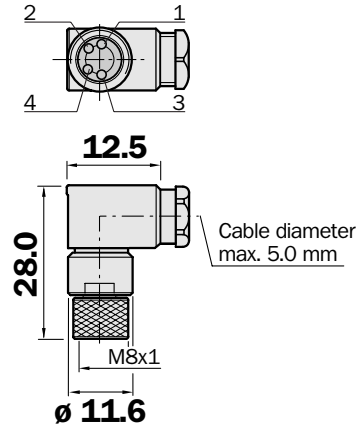
Female connector M8, 4-pin, straight

| Type | Order no. | Contacts |
|------------|-----------|----------|
| DOS-0804-G | 6009974 | 4 |



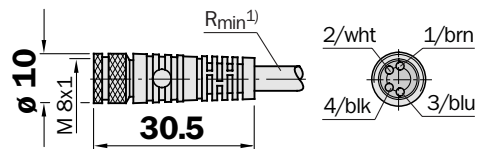
Female connector M8, 4-pin, right angle

| Type | Order no. | Contacts |
|------------|-----------|----------|
| DOS-0804-W | 6009975 | 4 |



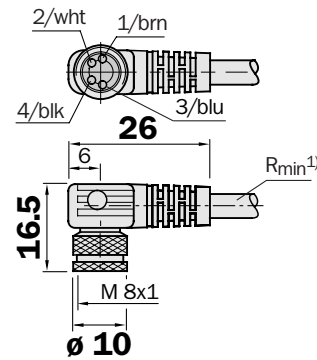
Female connector M8, 4-pin, straight

| 4 x 0.25 mm ² , sheath PVC | | | |
|---------------------------------------|-----------|----------|--------------|
| Type | Order no. | Contacts | Cable length |
| DOL-0804-G02M | 6009870 | 4 | 2 m |
| DOL-0804-G05M | 6009872 | 4 | 5 m |
| DOL-0804-G10M | 6010754 | 4 | 10 m |



Female connector M8, 4-pin, right angle

| 4 x 0.25 mm ² , sheath PVC | | | |
|---------------------------------------|-----------|----------|--------------|
| Type | Order no. | Contacts | Cable length |
| DOL-0804-W02M | 6009871 | 4 | 2 m |
| DOL-0804-W05M | 6009873 | 4 | 5 m |
| DOL-0804-W10M | 6010755 | 4 | 10 m |



¹⁾ Minimum bend radius in dynamic use
 $R_{min} = 20 \times \text{cable diameter}$

Dimensional drawings and order information

SENSICK screw-in system M8, 4-pin, enclosure rating IP 67

Female connector M8, 4-pin, straight

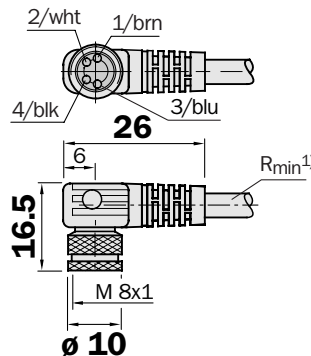
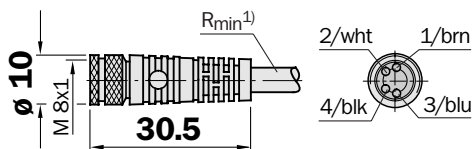
4 x 0.34 mm², sheath PUR halogen free

| Type | Order no. | Contacts | Cable length |
|----------------|-----------|----------|--------------|
| DOL-0804-G02MC | 6025894 | 4 | 2 m |
| DOL-0804-G05MC | 6025895 | 4 | 5 m |
| DOL-0804-G10MC | 6025896 | 4 | 10 m |

Female connector M8, 4-pin, right angle

4 x 0.34 mm², sheath PUR halogen free

| Type | Order no. | Contacts | Cable length |
|----------------|-----------|----------|--------------|
| DOL-0804-W02MC | 6025897 | 4 | 2 m |
| DOL-0804-W05MC | 6025898 | 4 | 5 m |
| DOL-0804-W10MC | 6025899 | 4 | 10 m |

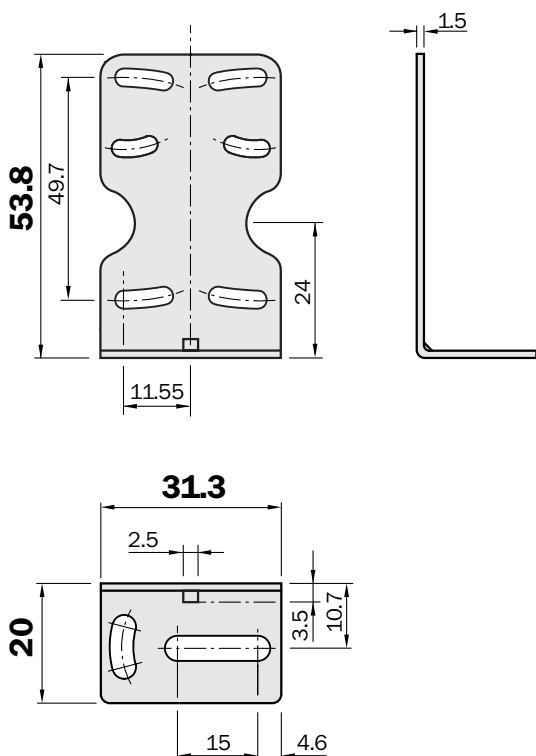


¹⁾ Minimum bend radius in dynamic use
 $R_{min} = 20 \times \text{cable diameter}$

Mounting brackets

Mounting bracket for W190T²⁾

| Type | Order no. |
|----------|-----------|
| BEF-W190 | 5311362 |



²⁾ Included in delivery

Australia

Phone +61 3 9497 4100
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 5091-4900
E-Mail sac@sick.com.br

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +852-2763 6966
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 (0)2 11 53 01-250
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-2822 7084
E-Mail info@sick-india.com

Italia

Phone +39 02 27 40 93 19
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail info@sick.jp

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

Republic of Korea

Phone +82-2 786 6321/4
E-Mail kang@sickkorea.net

Republika Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

Russia

Phone +7 95 775 05 30
E-Mail info@sick-automation.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 8 680 64 50
E-Mail info@sick.se

Taiwan

Phone +886 2 2365-6292
E-Mail sickgrc@ms6.hinet.net

Türkiye

Phone +90 216 388 95 90 pbx
E-Mail info@sick.com.tr

USA/Canada/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

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