# Retro-Reflex Sensors

## for Clear Glass Recognition    LASER
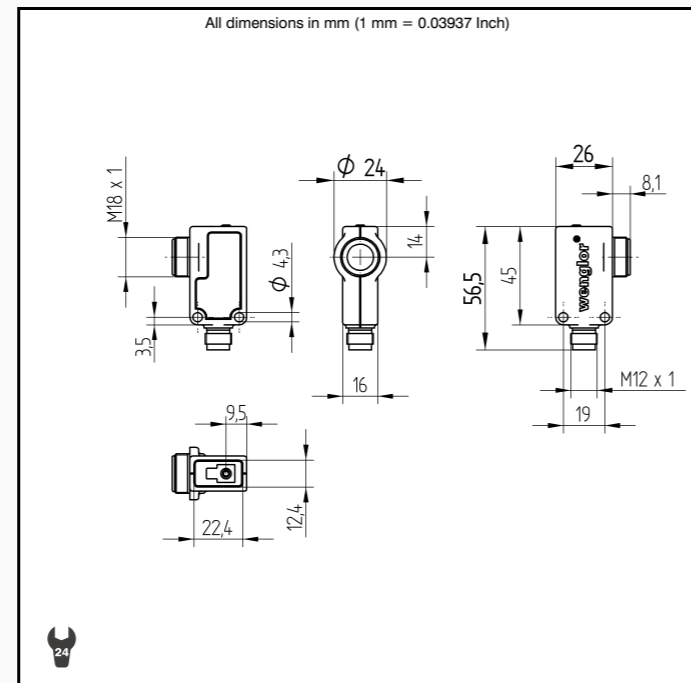
# XR96PCT2
Part Number

- **Easy to install**
- **Recognition of Clear Glass**
- **Teach-In, external Teach-In, RS-232 Interface**

A reflector must be used in combination with these sensors. wenglor has the right retro-reflex light barrier for every application. Even crystal-clear objects and sheet products can be reliably recognized. The sensor is easy to install with its integrated M18 threaded fixation, and can be easily protected as well. Time delay can be activated by RS-232 interface.
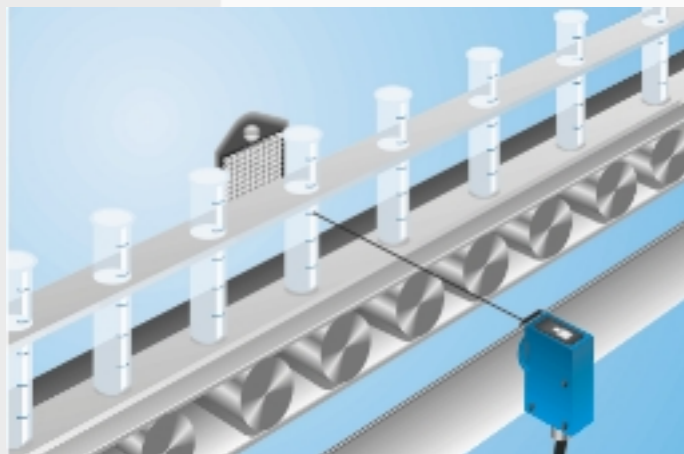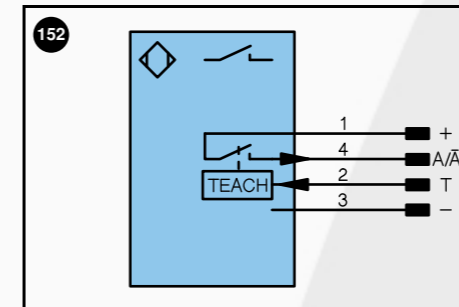
## Technical Data

| Optical Data | |
|---|---|
| Range | 9000 mm |
| Reference Reflector | RQ100BA |
| Clear Glass Recognition | yes |
| Switching Hysteresis | < 5 % |
| Light Source | Laser (red) |
| Wave Length | 655 nm |
| Polarization Filter | yes |
| Service Life (T = +25°C) | 100000 h |
| Laser Protection Class (EN 60825-1) | 2 |
| max. Ambient Light | 10000 Lux |
| Beam Divergence | 5 mrad |
| Focus Distance | 500 mm |
| **Electrical Data** | |
| Supply Voltage | 10...30 V  DC |
| Current Consumption (Ub = 24V) | < 40 mA |
| Switching Frequency | 2 kHz |
| Response Time | 250 $\mu$s |
| Time Delay | 0...5 s |
| Temperature Drift | < 5 % |
| Temperature Range | -10...60 °C |
| Switching Output Voltage Drop | < 2.5 V |
| PNP Switching Output/Switching Current | 200 mA |
| Residual Current Switching Output | < 50 $\mu$A |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Overload Protection | yes |
| Lockable | yes |
| Teach Mode | NT,MT |
| **Mechanical Data** | |
| Adjustment | Teach-In |
| Housing | Plastic |
| Full Encapsulation | yes |
| Protection Mode | IP 67 |
| Connection | M 12x1 |
| Protective Insulation, Rated Voltage | 50 V |

All dimensions in mm (1 mm = 0.03937 Inch)



| | Plug Version |
|---|---|
| | **XR96PCT2** |
| PNP NO/NC switchable | ● |
| RS-232 with Adapterbox | ● |
| Connection Diagram No. | 152 |
| Control Panel No. | M3 |
| Suitable Plug No. | |



**152**



### Legend

| | | | | |
|---|---|---|---|---|
| + | Power supply "+" | U | Test input | |
| – | Power supply "0V" | W | Trigger input | |
| ~ | Power supply (AC Voltage) | O | Analog output (1,2,3,...) | |
| A | Switching output (1,2,3...) / NO | O– | Ground for the analog output | |
| Ā | Switching output (1,2,3...) / NC | BZ | Block discharge | |
| V | Contamination / Error output (NO) | AW | Valve output | |
| V̄ | Contamination / Error output (NC) | a | Valve control output "+" | |
| E | Input (analog or digital) | b | Valve control output "0V" | |
| T | Teach input | SY | Synchronization | |
| Z | Time delay (activation) | E+ | Receiver-Line | |
| S | Shielding | S+ | Emitter-Line | |
| RxD | RS-232 receive path | ⏚ | Grounding | |
| TxD | RS-232 send path | | | |

Wire colors according to DIN IEC 757

| | |
|---|---|
| BK | black |
| BN | brown |
| RD | red |
| OG | orange |
| YE | yellow |
| GN | green |
| BU | blue |
| VT | violet |
| GY | grey |
| WH | white |
| PK | pink |
| GNYE | green yellow |

## Accessories
Adapterbox A232
Mounting Bracket W18
Reflector, Reflector Tape

## Ctrl.Panel



M 3
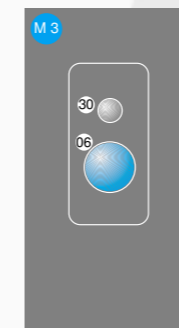
06 = Teach Button
30 = Switching Status/Contamination Warning