

# XW100PA3

Part Number

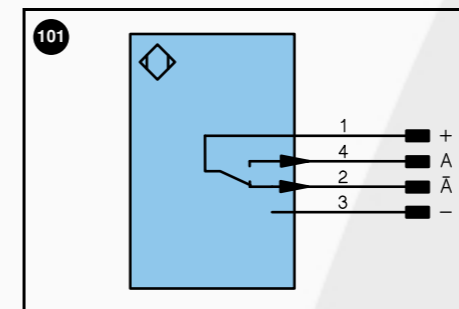


- Range: 14 m
- Smallest Recognizable Part: 0.1 mm
- Stainless Steel Housing
- Switching Frequency: 3 kHz

## Technical Data

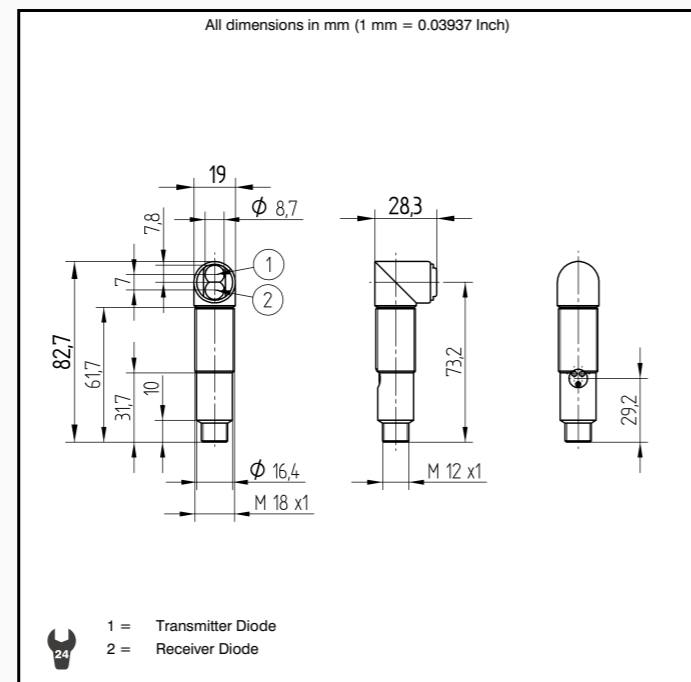
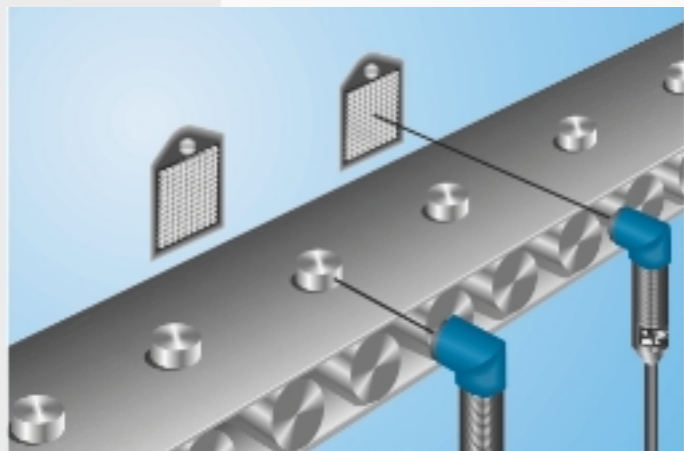
| Optical Data                               |                 |
|--|-----------------|
| Range                                      | 14000 mm        |
| Reference Reflector                        | RQ100BA         |
| Smallest Recognizable Part                 | 100 μm          |
| Switching Hysteresis                       | < 15 %          |
| 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       |
| Opening Angle                              | 1 °             |
| Beam Divergence                            | < 15 mrad       |
| Focus Distance                             | 350 mm          |
| Electrical Data                            |                 |
| Supply Voltage                             | 10...30 V DC    |
| Current Consumption (U <sub>b</sub> = 24V) | < 30 mA         |
| Switching Frequency                        | 3 kHz           |
| Response Time                              | 167 μs          |
| Temperature Drift                          | < 10 %          |
| Temperature Range                          | -25...60 °C     |
| Switching Output Voltage Drop              | < 2.5 V         |
| PNP Switching Output/Switching Current     | 200 mA          |
| Short Circuit Protection                   | yes             |
| Reverse Polarity Protection                | yes             |
| Overload Protection                        | yes             |
| Mechanical Data                            |                 |
| Housing                                    | Stainless Steel |
| Full Encapsulation                         | yes             |
| Protection Mode                            | IP 67           |
| Connection                                 | M 12x1          |
| Protective Insulation, Rated Voltage       | 50 V            |

| Plug Version           |          |
|------------------------|----------|
| Part Number            | XW100PA3 |
| PNP NO/NC antivalent   | ●        |
| Connection Diagram No. | 101      |
| Control Panel No.      | D 6      |
| Suitable Plug No.      | 1        |



| Legend |                                   |      |                              |                                      |
|--------|-----------------------------------|------|------------------------------|--------------------------------------|
| +      | Power supply "+"                  | U    | Test input                   | Wire colors according to DIN IEC 757 |
| -      | 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 |                                      |
| A̅     | Switching output (1,2,3...)/ NC   | BZ   | Block discharge              |                                      |
| V      | Contamination / Error output (NO) | Aw   | Valve output                 |                                      |
| V̅     | 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                  | 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                 |                                      |

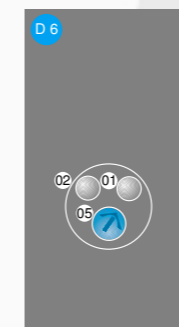
A reflector must be used in combination with these sensors. They can be installed in all kinds of industrial environments thanks to ample functional reserve. Even reflective objects can be reliably recognized through the use of polarized light.



## Accessories

- Mounting Clamp BSM18B
- Mounting Bracket W18
- Mounting Bracket W18L
- Reflector, Reflector Tape

## Ctrl. Panel



- 01 = Switching Status Indicator
- 02 = Contamination Warning
- 05 = Switching Distance Adjuster

## Smallest Recognizable Part

