

# Retro-Reflex Sensors

for Clear Glass Recognition

## LD86PA3

Part Number



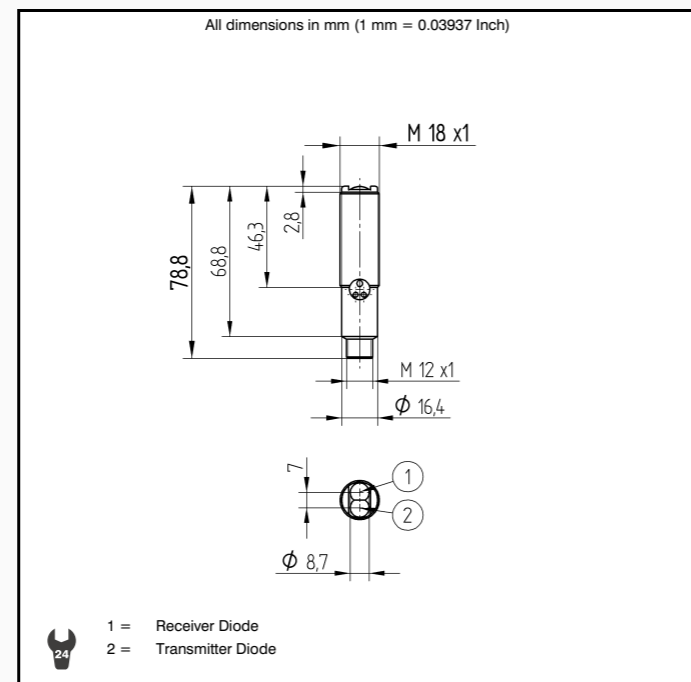
- Stainless Steel Housing
- Switching Distance Adjuster



### Technical Data

| Optical Data                               |                 |
|--|-----------------|
| Range                                      | 6000 mm         |
| Reference Reflector                        | RQ100BA         |
| Switching Hysteresis                       | < 15 %          |
| Light Source                               | Red Light       |
| Polarization Filter                        | yes             |
| Service Life (T = +25°C)                   | 100000 h        |
| max. Ambient Light                         | 10000 Lux       |
| Opening Angle                              | 5 °             |
| Electrical Data                            |                 |
| Supply Voltage                             | 10...30 V DC    |
| Current Consumption (U <sub>b</sub> = 24V) | < 40 mA         |
| Switching Frequency                        | 1 kHz           |
| Response Time                              | 500 μs          |
| Temperature Drift                          | < 10 %          |
| Temperature Range                          | -10...60 °C     |
| Switching Output Voltage Drop              | < 2.5 V         |
| PNP Switching Output/Switching Current     | 200 mA          |
| Residual Current Switching Output          | < 50 μA         |
| Short Circuit Protection                   | yes             |
| Reverse Polarity Protection                | yes             |
| Overload Protection                        | yes             |
| Mechanical Data                            |                 |
| Adjustment                                 | Potentiometer   |
| Housing                                    | Stainless Steel |
| Full Encapsulation                         | yes             |
| Protection Mode                            | IP 67           |
| Connection                                 | M 12x1          |
| Protective Insulation, Rated Voltage       | 50 V            |

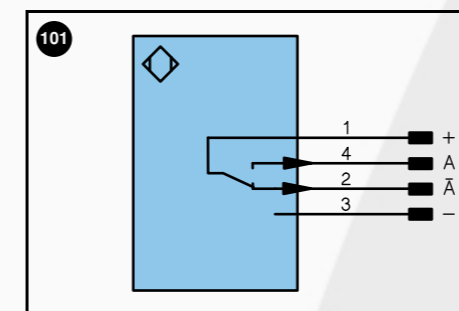
A reflector must be used in combination with these sensors. wenglor has the right retro-reflex light barrier for every application. Even crystal-clear objects and sheet products can be reliably recognized.



Specifications are subject to change without notice  
38/03



| Plug Version           |         |
|------------------------|---------|
| Part Number            | LD86PA3 |
| PNP NO/NC antivalent   | ●       |
| Connection Diagram No. | 101     |
| Control Panel No.      | D 6     |
| Suitable Plug No.      | 1       |

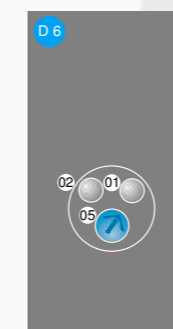


| Legend |                                   |    |                              |                                      |
|--------|-----------------------------------|----|------------------------------|--------------------------------------|
| +      | Power supply "+"                  | U  | Test input                   | Wire colors according to DIN IEC 757 |
| -      | Power supply "0V"                 | W  | Trigger input                | BK black                             |
| -      | Power supply (AC Voltage)         | O  | Analog output (1,2,3,...)    | BN brown                             |
| A      | Switching output (1,2,3...)/ NO   | O- | Ground for the analog output | RD red                               |
| A-bar  | Switching output (1,2,3...)/ NC   | BZ | Block discharge              | OG orange                            |
| V      | Contamination / Error output (NO) | Aw | Valve output                 | GN green                             |
| V-bar  | Contamination / Error output (NC) | a  | Valve control output "+"     | BU blue                              |
| E      | Input (analog or digital)         | b  | Valve control output "0V"    | VT violet                            |
| T      | Teach input                       | SY | Synchronization              | GY grey                              |
| Z      | Time delay (activation)           | E+ | Receiver-Line                | WH white                             |
| S      | Shielding                         | S+ | Emitter-Line                 | PK pink                              |
| RxD    | RS-232 receive path               | ⊕  | Grounding                    | GNYE green yellow                    |
| TxD    | RS-232 send path                  |    |                              |                                      |

### Accessories

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

### Ctrl. Panel



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