

# Fiber-optic amplifier

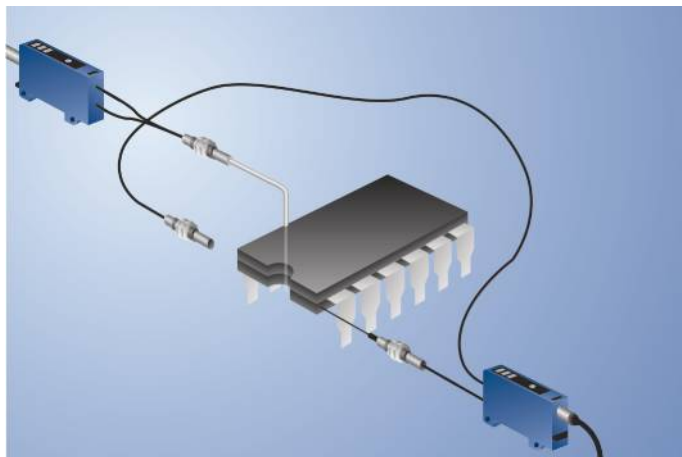
## DX22PCT8

Part Number



- Key potentiometer, teach-in
- Large detection and working range
- Recognition of transparent objects

Plastic fiber-optic cable with outside diameters of 1 mm and 2,2 mm can be connected to this sensor. The easy to use teach-in function allows for fine sensor adjustment, so that even transparent objects can be reliably recognized in through-beam mode operation. Scanning width is automatically adapted to each individual application via external teach-in. The devices can be easily mounted to standard DIN rails.

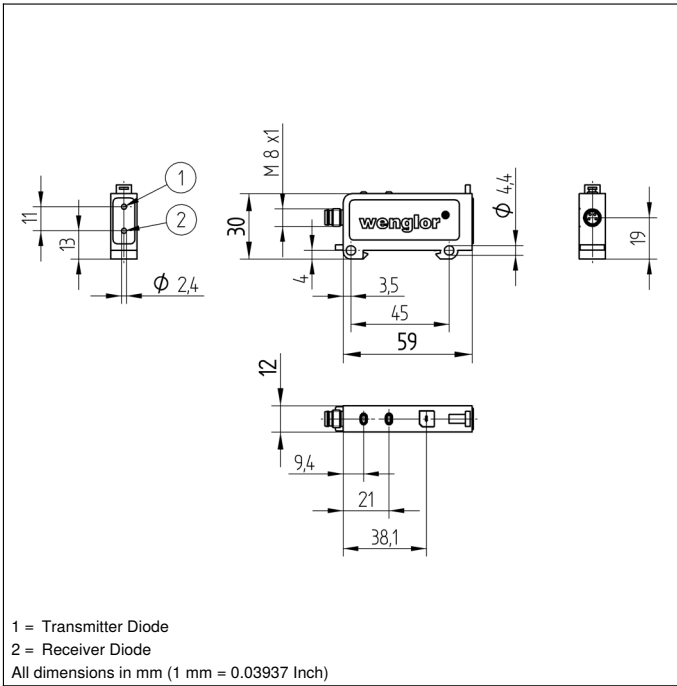


### Technical Data

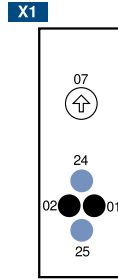
| Optical Data                                |                    |
|---|--------------------|
| Switching Hysteresis                        | < 15 %             |
| Light Source                                | Red Light          |
| Wavelength                                  | 660 nm             |
| Service Life (T = +25 °C)                   | 100000 h           |
| Max. Ambient Light                          | 10000 Lux          |
| Electrical Data                             |                    |
| Supply Voltage                              | 10...30 V DC       |
| Current Consumption (U <sub>b</sub> = 24 V) | < 40 mA            |
| Switching Frequency                         | 2 kHz              |
| Response Time                               | 250 μs             |
| On-/Off-Delay                               | 0...200 ms         |
| 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                |
| Teach Mode                                  | NT, MT, ZT, DT, TP |
| Protection Class                            | III                |
| Mechanical Data                             |                    |
| Setting Method                              | Teach-In           |
| Housing Material                            | Plastic            |
| Full Encapsulation                          | yes                |
| Degree of Protection                        | IP65               |
| Connection                                  | M8 × 1; 3-pin      |
| DIN-Rail mounting                           | 35 mm              |
| PNP NO/NC switchable                        | ●                  |
| Connection Diagram No.                      | <b>158</b>         |
| Control Panel No.                           | <b>X1</b>          |
| Suitable Connection Equipment No.           | <b>8</b>           |

### Complementary Products

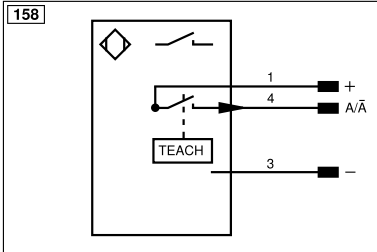
Plastic Fiber-Optic Cable



### Ctrl. Panel



- 01 = Switching Status Indicator
- 02 = Contamination Warning
- 07 = Selector Switch
- 24 = Plus Button
- 25 = Minus Button



| Legend    |  |          |  |
|-----------|--|----------|--|
| +         | Supply Voltage +                           | nc       | Not connected                          |
| -         | Supply Voltage 0 V                         | U        | Test Input                             |
| ~         | Supply Voltage (AC Voltage)                | Ü        | Test Input inverted                    |
| A         | Switching Output (NO)                      | W        | Trigger Input                          |
| Ā         | Switching Output (NC)                      | W-       | Ground for the Trigger Input           |
| V         | Contamination/Error Output (NO)            | O        | Analog Output                          |
| ȳ         | Contamination/Error Output (NC)            | O-       | Ground for the Analog Output           |
| E         | Input (analog or digital)                  | BZ       | Block Discharge                        |
| T         | Teach Input                                | Amv      | Valve Output                           |
| Z         | Time Delay (activation)                    | a        | Valve Control Output +                 |
| S         | Shielding                                  | b        | Valve Control Output 0 V               |
| RxD       | Interface Receive Path                     | SY       | Synchronization                        |
| TxD       | Interface Send Path                        | SY-      | Ground for the Synchronization         |
| RDY       | Ready                                      | E+       | Receiver-Line                          |
| GND       | Ground                                     | S+       | Emitter-Line                           |
| CL        | Clock                                      | ±        | Grounding                              |
| E/A       | Output/Input programmable                  | SnR      | Switching Distance Reduction           |
| IO-Link   |  | Rx+/-    | Ethernet Receive Path                  |
| PoE       | Power over Ethernet                        | Tx+/-    | Ethernet Send Path                     |
| IN        | Safety Input                               | Bus      | Interfaces-Bus A(+)/B(-)               |
| OSSD      | Safety Output                              | La       | Emitted Light disengageable            |
| Signal    | Signal Output                              | Mag      | Magnet activation                      |
| Bl_D+/-   | Ethernet Gigabit bidirect. data line (A-D) | RES      | Input confirmation                     |
| ENo RS422 | Encoder 0-pulse 0/0 (TTL)                  | EDM      | Contactor Monitoring                   |
| PT        | Platinum measuring resistor                | ENARs422 | Encoder A/Ā (TTL)                      |
|           |  |          | Encoder B/B̄ (TTL)                     |
|           |  |          | Encoder A                              |
|           |  |          | Encoder B                              |
|           |  |          | Digital output MIN                     |
|           |  |          | Digital output MAX                     |
|           |  |          | Digital output OK                      |
|           |  |          | Synchronization In                     |
|           |  |          | Synchronization OUT                    |
|           |  |          | Brightness output                      |
|           |  |          | Maintenance                            |
|           |  |          | Reserved                               |
|           |  |          | Wire Colors according to DIN IEC 60757 |
|           |  |          | 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                      |

