

Reflex Sensors

for Measuring Tasks

LASER

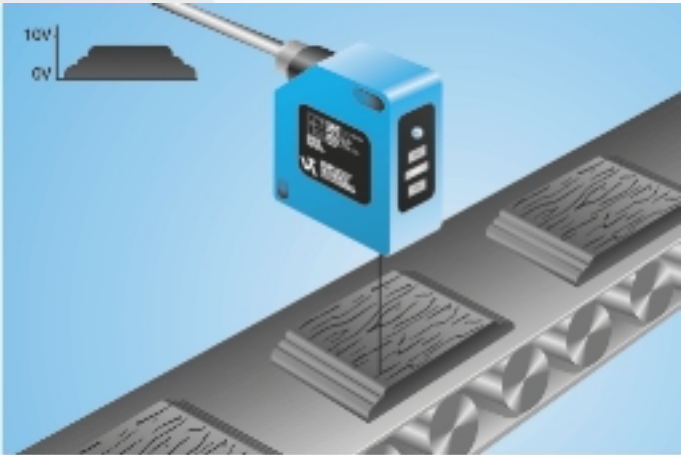
CP35MHT80

Part Number



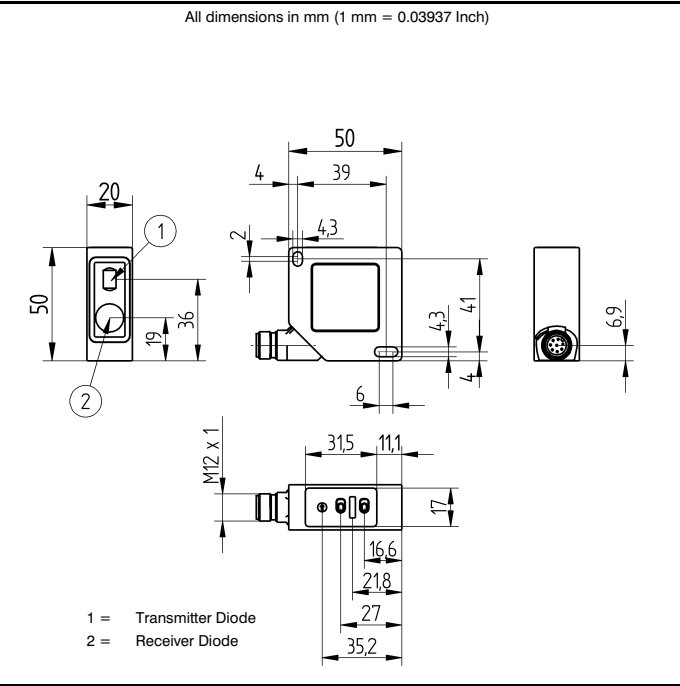
- Analog Output can be set to 0...10 V or 4...20 mA, RS-232 Interface
- Linearity: 0,4%
- Measured value independent of material, color and brightness
- Photodiodeline array technology

The output signal of the diffuse light sensor is practically independent of brightness, color and surface characteristics of the object to be measured. Even distances to glossy, black painted surface can be precisely measured. The measuring range can be set with the Teach-In function so that the full output range (0...10 V or 4...20 mA) can be exploited in all applications.



Technical Data

| Optical Data | |
|--------------------------------------|--------------|
| Working Range | 50...350 mm |
| Measuring Distance | 200 mm |
| Measuring Range | 300 mm |
| Resolution | < 250 µm |
| Linearity | 0.4 % |
| Light Source | Laser (red) |
| Wave Length | 660 nm |
| Service Life (T = +25°C) | 100000 h |
| Laser Protection Class (EN 60825-1) | 2 |
| max. Ambient Light | 10000 Lux |
| Electrical Data | |
| Supply Voltage | 18...30 V DC |
| Current Consumption (Ub = 24V) | < 60 mA |
| Cut-Off Frequency | 150 Hz |
| Response Time | < 3300 µs |
| Temperature Drift | < 25 µm/°C |
| Temperature Range | -25...60 °C |
| Error Output Voltage Drop | < 2.5 V |
| PNP Error Output/Switching Current | 200 mA |
| Analog Output | 0...10 V |
| Current Load Voltage Output | < 1 mA |
| Analog Output | 4...20 mA |
| Current Output Load Resistance | < 500 Ohm |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Interface | RS-232 |
| Baud Rate | 38400 Bd |
| Protocol | 8 N 1 |
| Mechanical Data | |
| Adjustment | Teach-In |
| Housing | Plastic |
| Protection Mode | IP 67 |
| Connection | M 12x1 |
| Protective Insulation, Rated Voltage | 50 V |

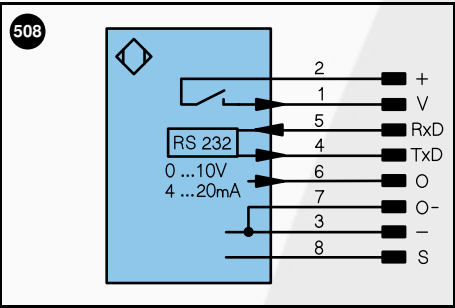


| Plug Version | |
|------------------------|-----------|
| Part Number | CP35MHT80 |
| Error Output | ● |
| Analog Output | ● |
| RS-232 Interface | ● |
| Connection Diagram No. | 508 |
| Control Panel No. | P 7 |
| Suitable Plug No. | 80 |



Table 1

| | | |
|------------------|--------------|------------|
| Working Distance | 50 mm | 350 mm |
| Light Spot Size | 0.6 x 1.5 mm | 1.5 x 4 mm |

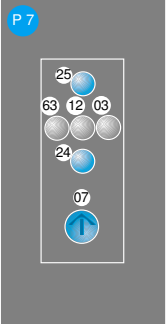


| Legend | | |
|-------------------------------------|---------------------------------|--------------------------------------|
| + Power supply "+" | U Test input | Wire colors according to DIN IEC 757 |
| - Power supply "0V" | W Trigger input | |
| ~ Power supply (AC Voltage) | O Analog output (1,2,3,...)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

Accessories

- Mounting Bracket WP
- Serial Interface Adapter S232W2

Ctrl.Panel



- 03 = Error Indicator
- 07 = Selector Switch
- 12 = Analog Output Indicator
- 24 = Plus Button
- 25 = Minus Button
- 63 = Analog Output Current Indicator