

# High-Performance Distance Sensor

## OCP801P0150P

### LASER

IndustrialEthernet

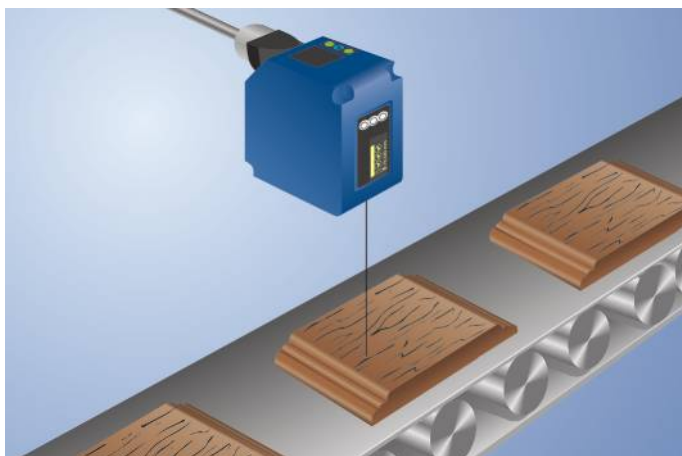
Part Number



- CMOS line array
- Industrial Ethernet
- Measured value independent of material, color and brightness
- Web server and graphic display for simple operation

These sensors work with a high-resolution CMOS line and DSP technology and determine distance using angular measurement.

Sensors with Industrial Ethernet make the analog and digital input cards at control units unnecessary, as all service and measurement data is read, analyzed and processed in the control unit in real time, without the need for conversion. Power over Ethernet connects data transfer and power supply in one cable and thus reduces the wiring effort.



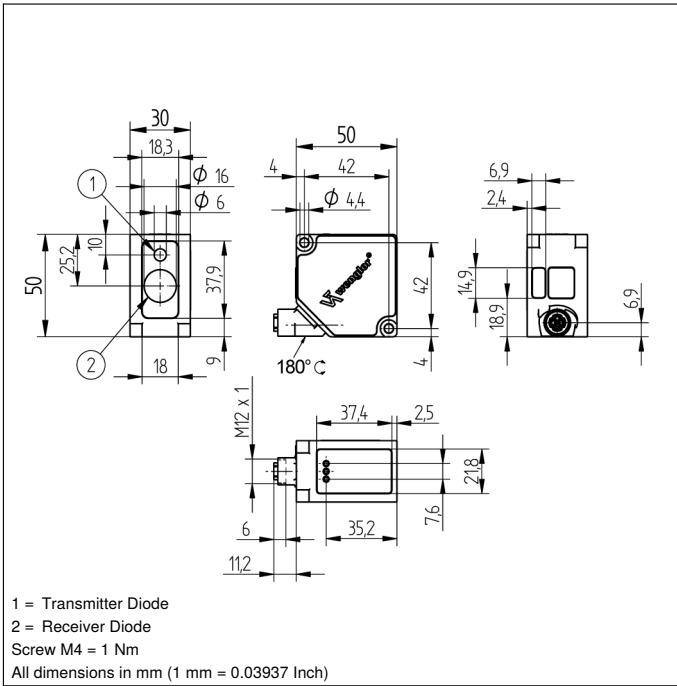
### Technical Data

Optical Data	
Working Range	30...80 mm
Measuring Range	50 mm
Reproducibility maximum	15...50 μm
Linearity Deviation	50...100 μm
Light Source	Laser (red)
Wavelength	655 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Max. Ambient Light	10000 Lux
Light Spot Diameter	3,6 × 0,9 mm
Electrical Data	
Port Type	100BASE-TX
PoE Class	1
Output rate	330 /s
Temperature Drift	< 5 μm/K
Temperature Range	-25...50 °C
Reverse Polarity Protection	yes
Interface	PROFINET
Protection Class	III
Mechanical Data	
Setting Method	Menu (OLED)
Housing Material	Metal
Degree of Protection	IP68
Connection	M12 × 1; 8-pin, X-cod.
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	350,69 a
Web server	yes
PROFINET IO, CC-B	●
Connection Diagram No.	001
Control Panel No.	X2   T12
Suitable Connection Equipment No.	50
Suitable Mounting Technology No.	380

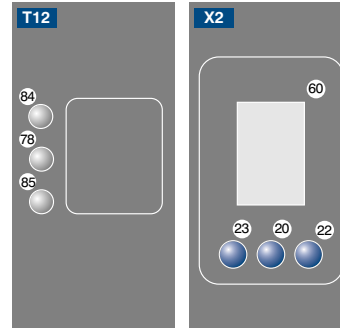
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

### Complementary Products

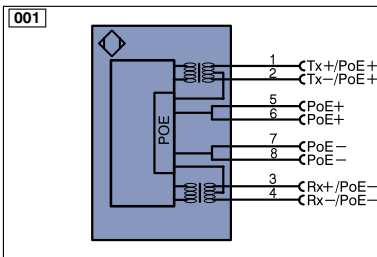
Midspan Adapter Z0029
Protective Housing ZNNS001, ZNNS002
Switch/Junction with PoE ZAC50xN0x



### Ctrl. Panel



- 20 = Enter Button
- 22 = UP Button
- 23 = Down Button
- 60 = Display
- 78 = Module status
- 84 = Communication Status
- 85 = Link/Act LED



Legend		Legend		Legend	
+	Supply Voltage +	PT	Platinum measuring resistor	EN <sup>A</sup> ES42Z	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN <sup>B</sup> ES42Z	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN <sup>A</sup>	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN <sup>B</sup>	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A <sup>MIN</sup>	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A <sup>MAX</sup>	Digital output MAX
Ṽ	Contamination/Error Output (NC)	O	Analog Output	A <sup>OK</sup>	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY <sup>in</sup>	Synchronization In
T	Teach Input	BZ	Block Discharge	SY <sup>OUT</sup>	Synchronization OUT
Z	Time Delay (activation)	A <sup>WV</sup>	Valve Output	OL <sup>T</sup>	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to DIN IEC 757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	⊕	Grounding	OG	Orange
	IO-Link	S <sup>nR</sup>	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	L <sup>a</sup>	Emitted Light disengageable	GY	Grey
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sup>0</sup> ES42Z	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactor Monitoring	GNYE	Green/Yellow

