

Laser Distance Sensor

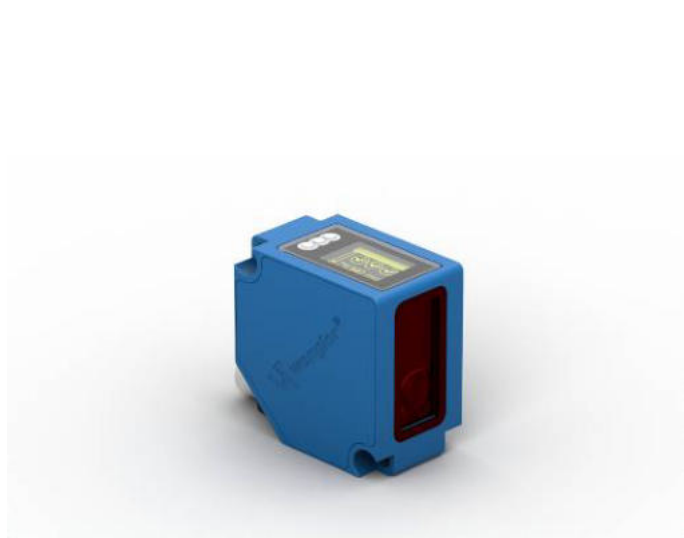
High-Precision

OCP801P0150C

LASER

Part Number

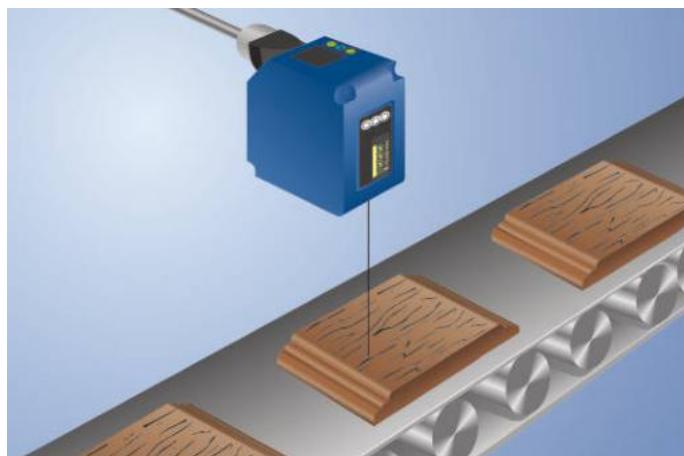
IndustrialEthernet



- 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	EtherCAT
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
EoE (Ethernet over EtherCAT)	yes

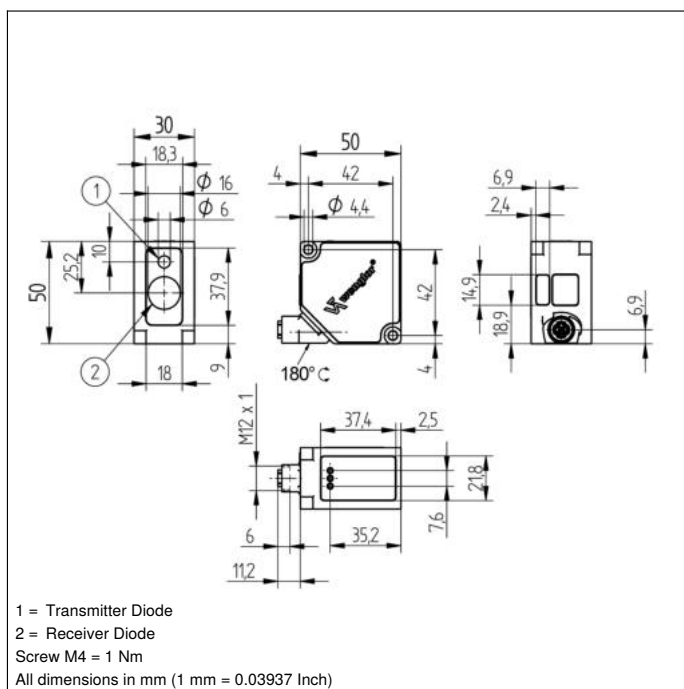
EtherCAT

Connection Diagram No.	001
Control Panel No.	X2 T15
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

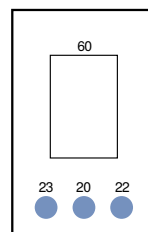


Ctrl. Panel

5

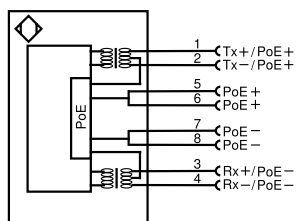
X2

86
78
85



20 = Enter key
22 = Up key
23 = Down key
60 = display
78 = Module status
85 = Link/Act LED
86 = STATUS

001



Legend							
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B (TTL)		
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A		
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted	ENb	Encoder B		
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN		
Ä	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX		
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK		
V̄	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In		
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT		
T	Teach Input	Amv	Valve Output	OLT	Brightness output		
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance		
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved		
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757			
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black		
RDY	Ready	E+	Receiver-Line	BN	Brown		
GND	Ground	S+	Emitter-Line	RD	Red		
CL	Clock	±	Grounding	OG	Orange		
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow		
IO-Link		Rx+/-	Ethernet Receive Path	GN	Green		
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue		
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet		
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey		
Signal	Signal Output	Mag	Magnet activation	WH	White		
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink		
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow		
PT	Platinum measuring resistor	ENARIS422	Encoder A/A (TTL)				

