

Laser Distance Sensor

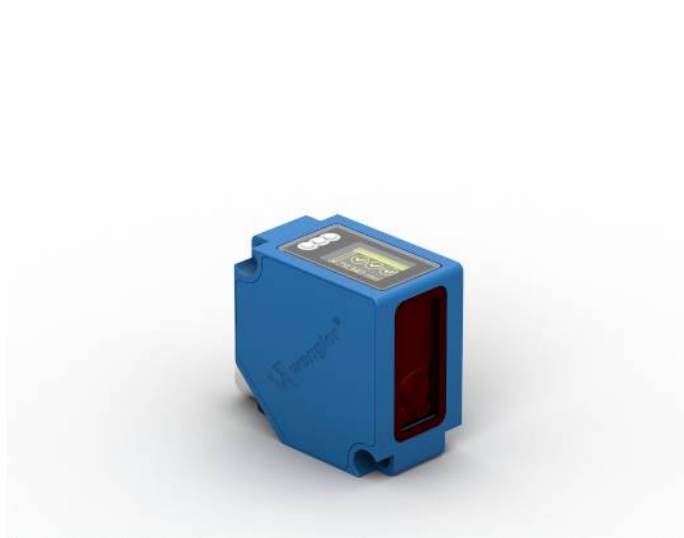
Triangulation

OCP162P0150C

LASER

Part Number

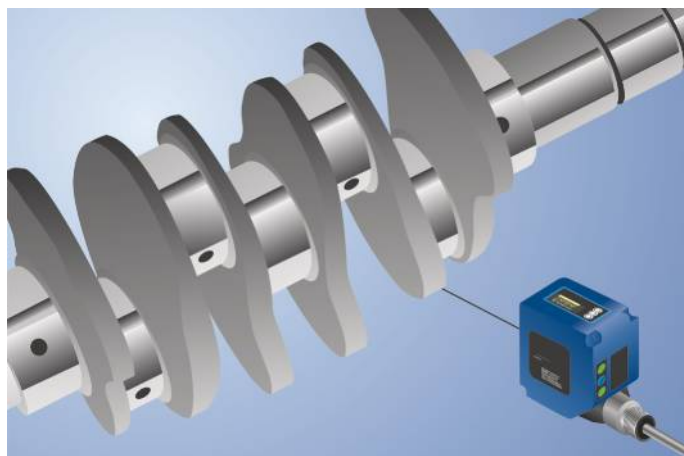
IndustrialEthernet



- 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	40...160 mm
Measuring Range	120 mm
Reproducibility maximum	20...70 µm
Linearity Deviation	50...160 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	< 10 µm/K
Temperature Range	-25...50 °C
Reverse Polarity Protection	yes
Interface	EtherCAT
Protection Class	III
FDA Accession Number	2010120-000

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

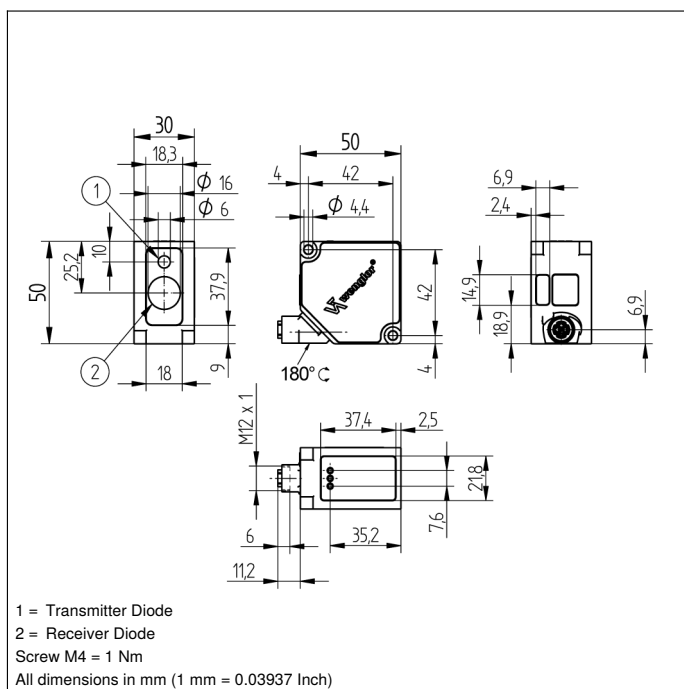
EtherCAT

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

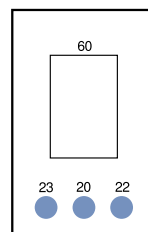
Midspan Adapter Z0029
Protective Housing ZNNS001, ZNNS002
Switch/Junction with PoE ZAC50xN0x



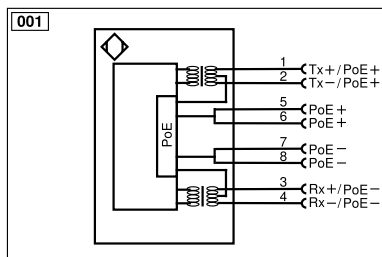
Ctrl. Panel

T15

X2



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



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
Ä	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	Contact Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/A (TTL)
		ENBrs422	Encoder B/B (TTL)
		ENA	Encoder A
		ENb	Encoder B
		AMIN	Digital output MIN
		AMAX	Digital output MAX
		Ack	Digital output OK
		SY In	Synchronization In
		SY OUT	Synchronization OUT
		OLt	Brightness output
		M	Maintenance
		rsv	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

