# **High-Performance Distance Sensor**

# OCP162P0150C

### **LASER**

#### **Industrial**Ethernet

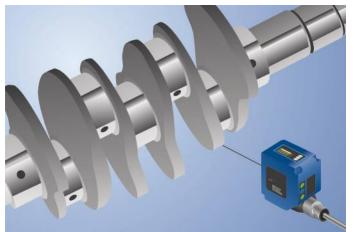




- CMOS line array
- **Industrial Ethernet**
- Measured value independent of material, color and brightness
- Web server and graphic display for simple operation

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**

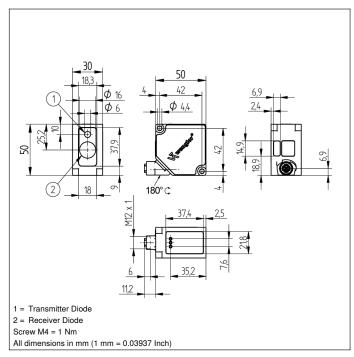
Optical Data	
Working Range	40160 mm
Measuring Range	120 mm
Reproducibility maximum	2070 <i>μ</i> m
Linearity Deviation	50160 <i>μ</i> m
Light Source	Laser (red)
Wavelength	655 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Max. Ambient Light	10000 Lux
Light Spot Diameter	3,6 × 0,9 mm
Electrical Data	
Port Type	100BASE-TX
PoE Class	1
Output rate	330 /s
Temperature Drift	< 10 µm/K
Temperature Range	-2550 °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
B	

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

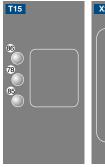
#### **Complementary Products**

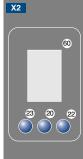
Midspan Adapter Z0029 Protective Housing ZNNS001, ZNNS002 Switch/Junction with PoE ZAC50xN0x



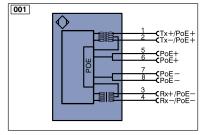


### Ctrl. Panel





- 20 = Enter Button
- 22 = UP Button
- 23 = Down Button
- 60 = Display
- 78 = Module status
- 85 = Link/Act LED
- 86 = STATUS



_egen	a		PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)	
+	Supply Voltage +		nc	not connected	ENBRS422	Encoder B/B (TTL)	
-	Supply Voltage 0 V		U	Test Input	ENA	Encoder A	
~	Supply Voltage (AC Voltage)		Ū	Test Input inverted	ENB	Encoder B	
Α	Switching Output	(NO)	W	Trigger Input	Amin	Digital output MIN	
Ā	Switching Output	(NC)	W -	Ground for the Trigger Input	Амах	Digital output MAX	
V	Contamination/Error Output	(NO)	0	Analog Output	Аок	Digital output OK	
V	Contamination/Error Output	(NC)	0-	Ground for the Analog Output	SY In	Synchronization In	
E	Input (analog or digital)		BZ	Block Discharge	SY OUT	Synchronization OUT	
Т	Teach Input		Awv	Valve Output	OLT	Brightness output	
Z	Time Delay (activation)		а	Valve Control Output +	М	Maintenance	
S	Shielding		b	Valve Control Output 0 V	rsv	reserved	
RxD	Interface Receive Path		SY	Synchronization	Wire Co	Wire Colors according to DIN IEC 757	
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		Yellow	
0	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	
BI_D+/-	Ethernet Gigabit bidirect, data	line (A-D)	RES	Input confirmation	PK	Pink	
ENORS422	Encoder 0-pulse 0-0 (TTL)		EDM	Contactor Monitoring	GNYE	Green/Yellow	









