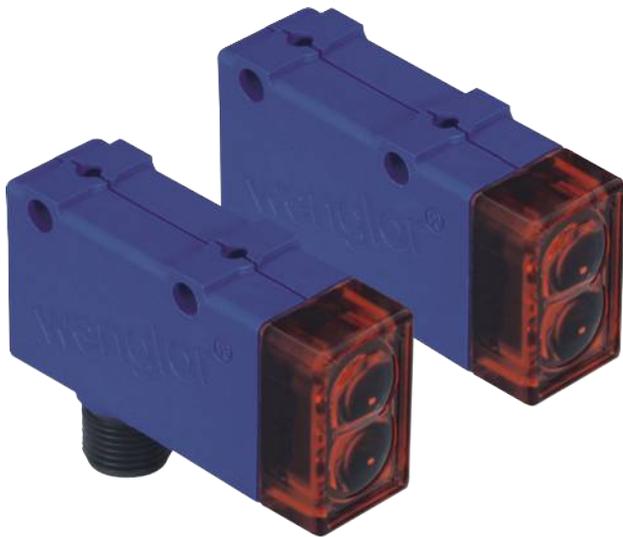


Through-Beam Sensor

SM982

Part Number



- Compact housing
- Red light
- Test input

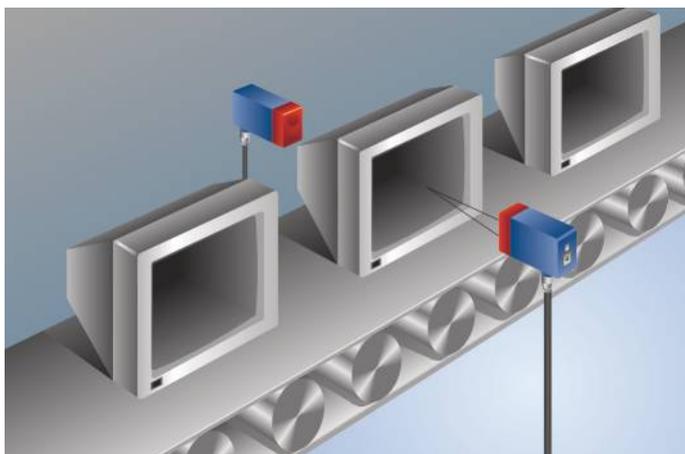
Technical Data

Optical Data	
Range	10000 mm
Light Source	Red Light
Service Life (T = +25 °C)	100000 h
Opening Angle	4 °
Electrical Data	
Sensor Type	Emitter
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
Connection Diagram No.	1018
Control Panel No.	K3
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	360

Suitable Receiver

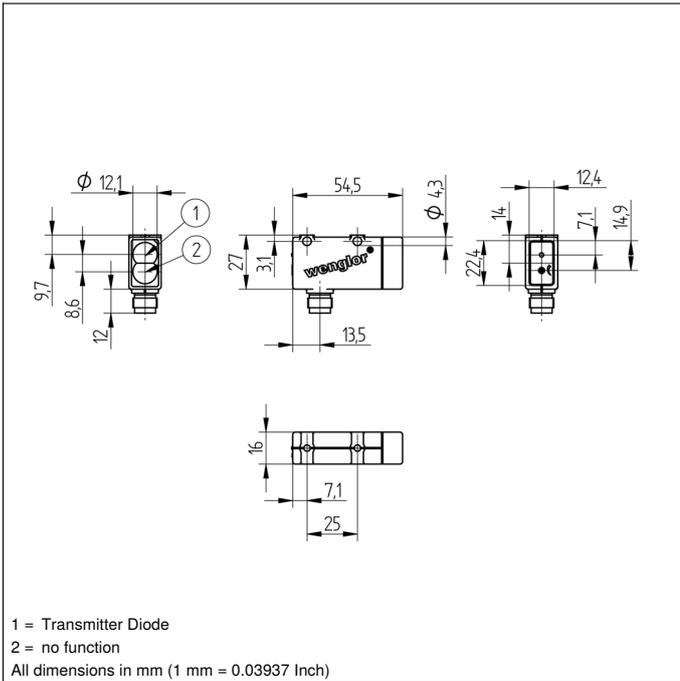
EM98PA2

These through-beam sensors are best suited for use in industrial environments. Thanks to their large working range, the devices demonstrate excellent functional reliability in highly contaminated environments. The sensors can be checked for correct functioning via the test input.

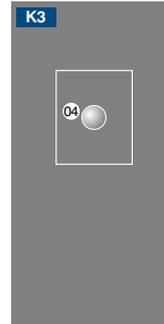


Complementary Products

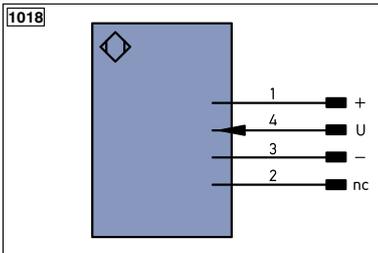
Protective Housing ZSV-0x-01
Set Protective Housing ZSM-NN-02



Ctrl. Panel



04 = Function Indicator



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN ^{A/RS422}	Encoder A/ \bar{A} (TTL)
-	Supply Voltage 0 V	nc	not connected	EN ^{B/RS422}	Encoder B/ \bar{B} (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN ^A	Encoder A
A	Switching Output (NO)	\bar{U}	Test Input inverted	EN ^B	Encoder B
\bar{A}	Switching Output (NC)	W	Trigger Input	A ^{MIN}	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A ^{MAX}	Digital output MAX
\bar{V}	Contamination/Error Output (NC)	O	Analog Output	A ^{OK}	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY ^{In}	Synchronization In
T	Teach Input	BZ	Block Discharge	SY ^{OUT}	Synchronization OUT
Z	Time Delay (activation)	A ^{WV}	Valve Output	OL ^T	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	r ^{sv}	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	\pm	Grounding	OG	Orange
	IO-Link	S ^{nR}	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 ^a	Emitted Light disengageable	GY	Grey
BI ^{-D} +/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN ^{0/RS422}	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GN ^{YE}	Green/Yellow

