

Light Curtain for Measuring Tasks

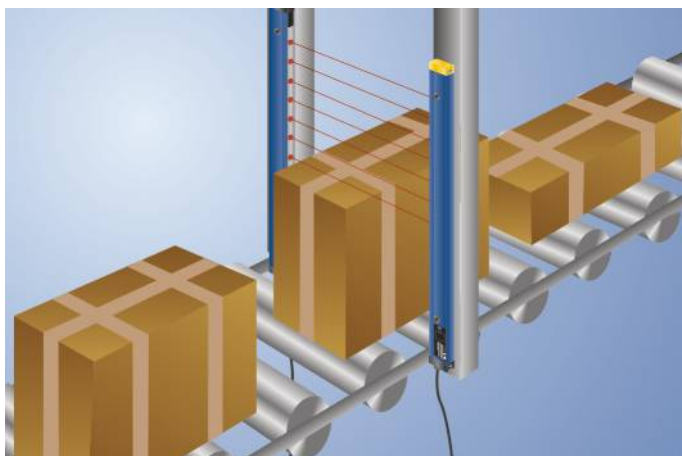
OEEB302U0135

Part Number



- 360° visible switching status display
- Graphical display for easy operation
- Integrated evaluation unit
- Object detection and measurement

As these light curtains for measurement tasks are equipped with an integrated evaluation unit, external connection units are not needed. Objects are both recognized (via the digital output) and measured (via the analog output). The light curtains can be set up easily using the menu-controlled graphic display. Convenient parametrization and quick diagnosis is possible via the IO-Link interface.



Technical Data

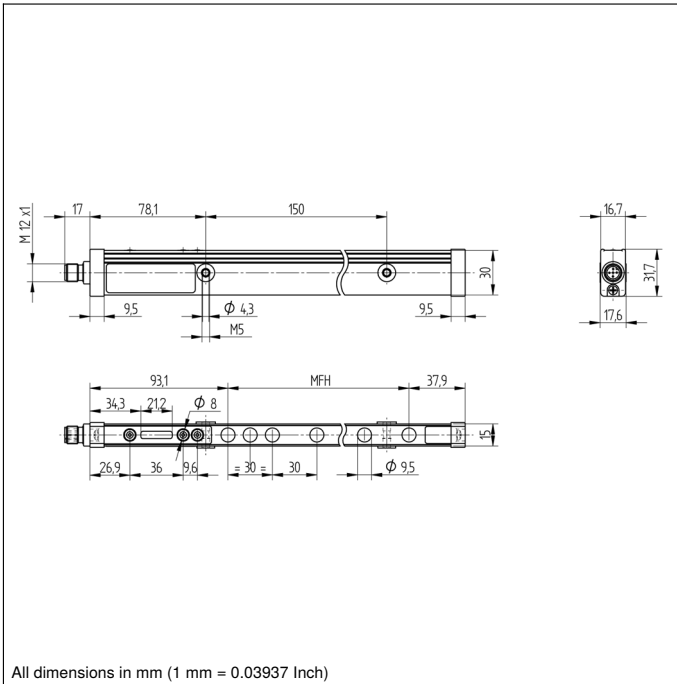
Optical Data	
Range	3000 mm
Measurement Field Height (MFH)	300 mm
Beam Distance	30 mm
Light Source	Infrared Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	10 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Switching Frequency	41 Hz
Response Time	12 ms
On-/Off-Delay	0...10 s
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 μA
Analog Output	0...10 V/4...20 mA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Lockable	yes
Interface	IO-Link V1.0
Protection Class	III
Mechanical Data	
Setting Method	Menu (OLED)
Housing Material	Aluminum
Degree of Protection	IP65
Connection	M12 × 1; 4/5-pin
Switchable to NC/NO	●
Configurable as PNP/Push-Pull	●
Error Output	●
IO-Link	●
Connection Diagram No.	188
Control Panel No.	EB3
Suitable Connection Equipment No.	2 35

Suitable Emitter

OSEB302Z0103
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

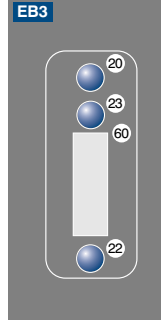
Complementary Products

Analog Evaluation Unit AW02
IO-Link Master
Software



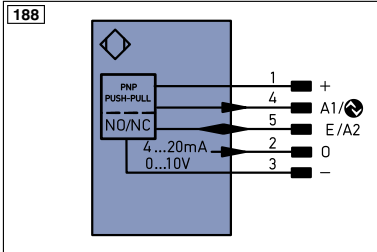
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



20 = Enter Button
 22 = UP Button
 23 = Down Button
 60 = Display

188



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
~	Supply Voltage (AC Voltage)	\bar{U}	Test Input inverted	EN ^B	Encoder B
A	Switching Output (NO)	W	Trigger Input	A ^{MIN}	Digital output MIN
\bar{A}	Switching Output (NC)	W-	Ground for the Trigger Input	A ^{MAX}	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	A ^{OK}	Digital output OK
\bar{V}	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	A ^{MV}	Valve Output	OL ^T	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 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	\pm	Grounding	OG	Orange
E/A	Output/Input programmable	S ⁿ R	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	L ^a	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
EN ⁰ RS422	Encoder 0-pulse 0-0 (TTL)	EDM	Contacting Monitoring	GNYE	Green/Yellow

