

Light Curtain for Measuring Tasks

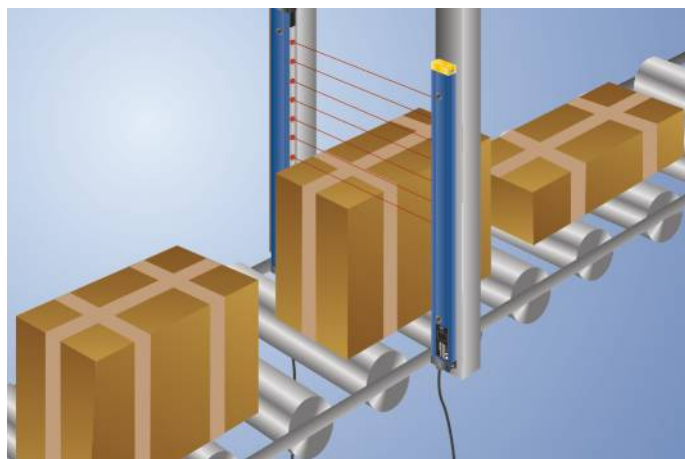
OEEB452U0135

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)	450 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	29 Hz
Response Time	17 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

OSEB452Z0103

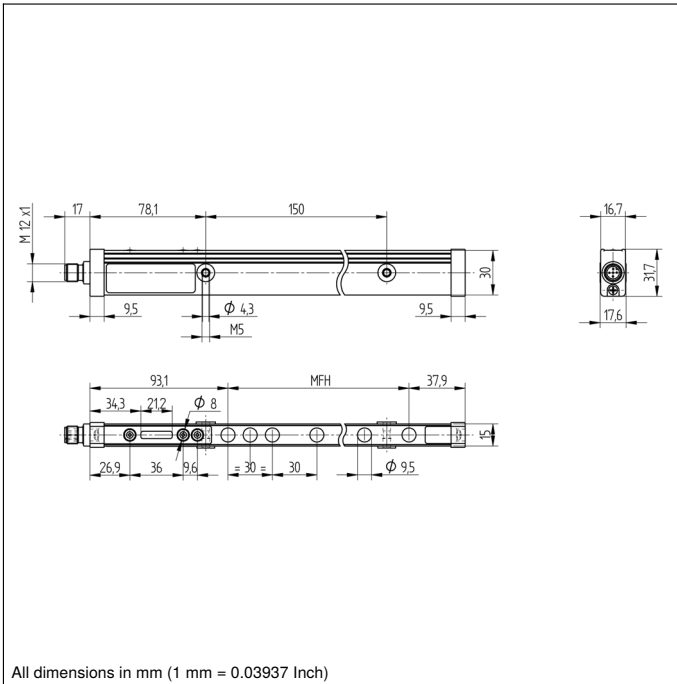
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

Complementary Products

Analog Evaluation Unit AW02

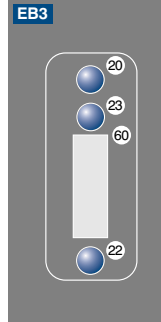
IO-Link Master

Software



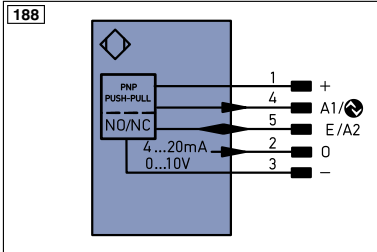
All dimensions in mm (1 mm = 0.03937 Inch)

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
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 ^{MV}	Valve Output	OL ^T	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	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 ⁿ R	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
Bl_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	GNYE	Green/Yellow

