

Light Curtain for Measuring Tasks

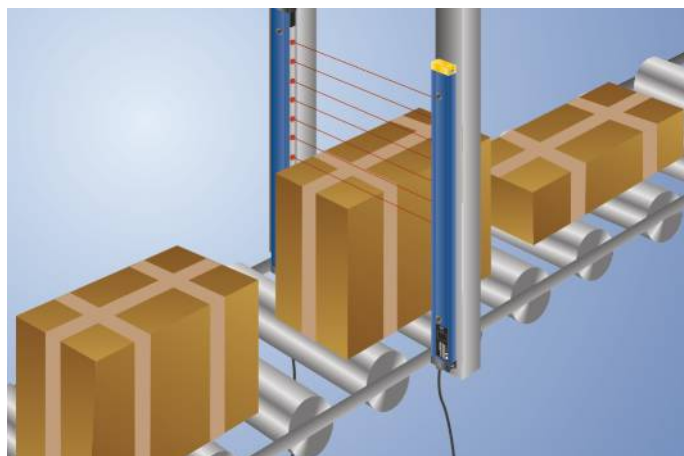
OEEB163U0135

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)	1650 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)	< 50 mA
Switching Frequency	9 Hz
Response Time	57 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	●

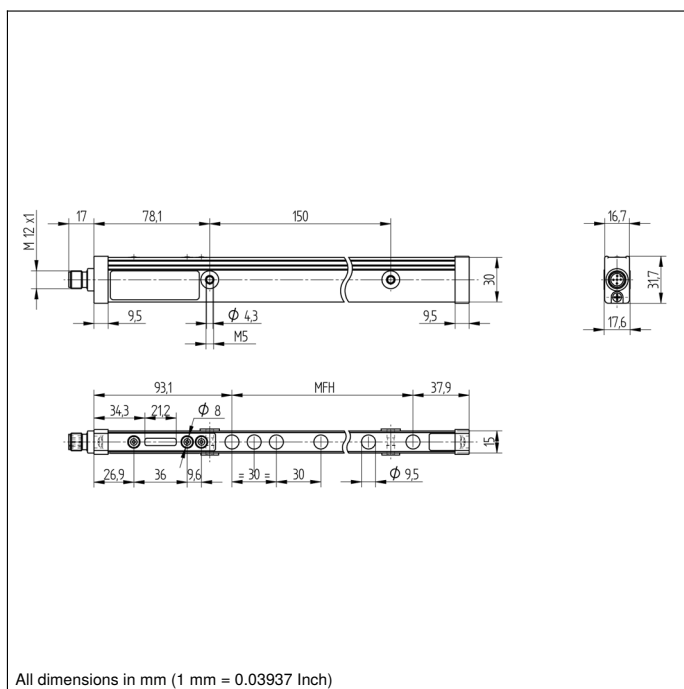
Connection Diagram No.	188
Control Panel No.	EB3
Suitable Connection Equipment No.	2 35

Suitable Emitter

OSEB163Z0103
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

Complementary Products

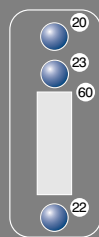
Analog Evaluation Unit AW02
IO-Link Master
Software



All dimensions in mm (1 mm = 0.03937 Inch)

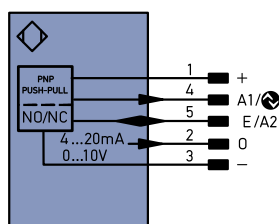
Ctrl. Panel

EB3



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

188



Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	U	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	AWV	Valve Output
S	Shielding	a	Valve Control Output +
RxD	Interface Receive Path	b	Valve Control Output 0 V
TxD	Interface Send Path	SY	Synchronization
RDY	Ready	SY-	Ground for the Synchronization
GND	Ground	E+	Receiver-Line
CL	Clock	S+	Emitter-Line
E/A	Output/Input programmable	±	Grounding
IO-Link	IO-Link	SnR	Switching Distance Reduction
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path
IN	Safety Input	Tx+/-	Ethernet Send Path
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)
Signal	Signal Output	La	Emitted Light disengageable
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation
EN0 RS422	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation
		EDM	Contact Monitoring

ENAR5422	Encoder A/Ā (TTL)
ENBR5422	Encoder B/B̄ (TTL)
ENA	Encoder A
ENB	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
OLt	Brightness output
M	Maintenance
rsv	reserved
Wire Colors according to 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

