

Light Curtain for Measuring Tasks

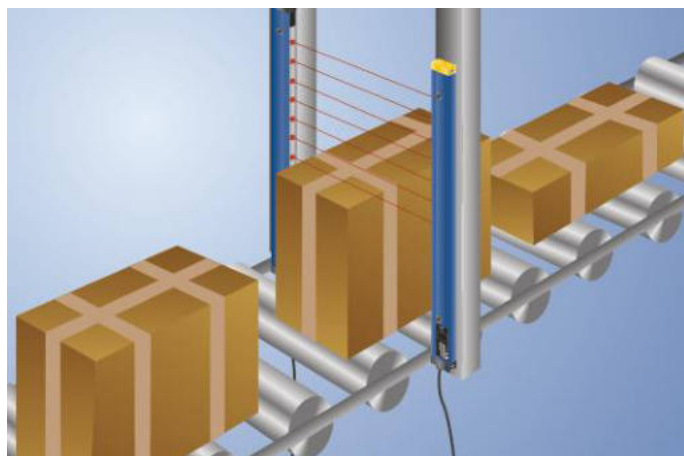
OEEB153U0135

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)	1500 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	10 Hz
Response Time	52 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

OSEB153Z0103

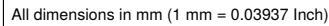
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

Complementary Products

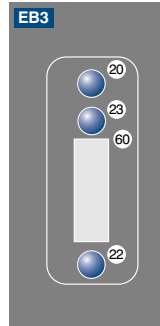
Analog Evaluation Unit AW02

IO-Link Master

Software



EB3



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



Legend	
+	Supply Voltage +
–	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ā	Switching Output (NC)
V	Contamination/Error Output (NO)
Ṽ	Contamination/Error Output (NC)
Y	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
⚡	IO -Link
PoE	Power over Ethernet
IN	Safety Input
QSSD	Safety Output
Signal	Signal Output
BI-D _{+/~}	Ethernet Gigabit bidirect. data line (A-D)
EN0 _{RS422}	Encoder 0-pulse 0-0̇ (TTL)

PT	Platinum measuring resistor
nc	not connected
U	Test Input
$\bar{U}$	Test Input inverted
W	Trigger Input
W –	Ground for the Trigger Input
O	Analog Output
O –	Ground for the Analog Output
BZ	Block Discharge
AWV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY –	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
$\pm$	Grounding
S_NR	Switching Distance Reduction
Rx+/–	Ethernet Receive Path
Tx+/–	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(–)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contacteur Monitoring

ENAR542Z	Encoder A/ $\bar{A}$ (TTL)
ENBR542Z	Encoder B/ $\bar{B}$ (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

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