

Light Curtain for Measuring Tasks

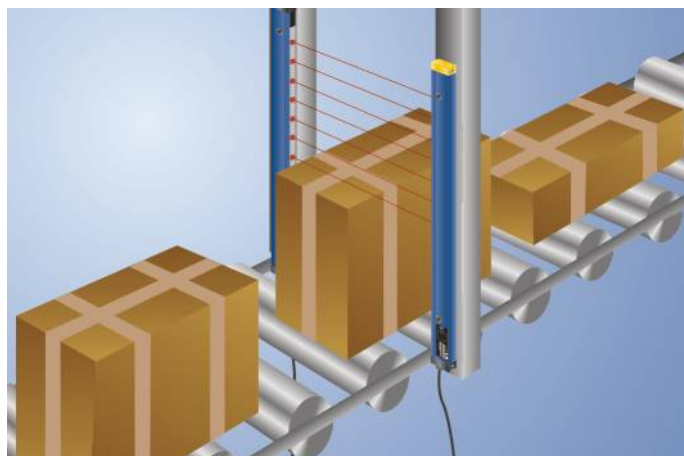
OEEB123U0135

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

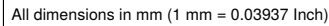
Optical Data	
Range	3000 mm
Measurement Field Height (MFH)	1200 mm
Beam Distance	30 mm
Light Source	Infrared Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	10 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 50 mA
Switching Frequency	12 Hz
Response Time	42 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

OSEB123Z0103
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

Complementary Products

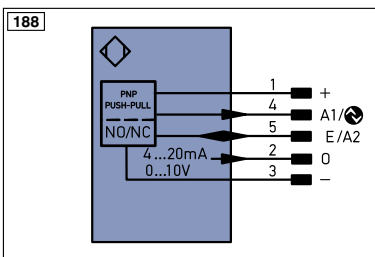
Analog Evaluation Unit AW02
IO-Link Master
Software




EB3

Diagram illustrating a vertical stack of four spheres. The top sphere is blue and labeled 20. The second sphere is blue and labeled 23. The third sphere is a light gray rectangle and labeled 60. The bottom sphere is blue and labeled 22.

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



Legend

+	Supply Voltage +	P1	Platinum measuring resistor	EN _{RS422}	Encoder A/A (TTL)
-	Supply Voltage 0 V	nc	not connected	EN _{RS422}	Encoder B/B (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN _A	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN _B	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
Ī	Contamination/Error Output (NC)	O	Analog Output	ACK	Digital output OK
ē	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	AWV	Valve Output	OLT	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 IEC 60757	
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	±	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	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
0SSD	Safety Output	La	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 _{0RS422}	Encoder 0-pulse 0-0 (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow

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