

Light Curtain for Measuring Tasks

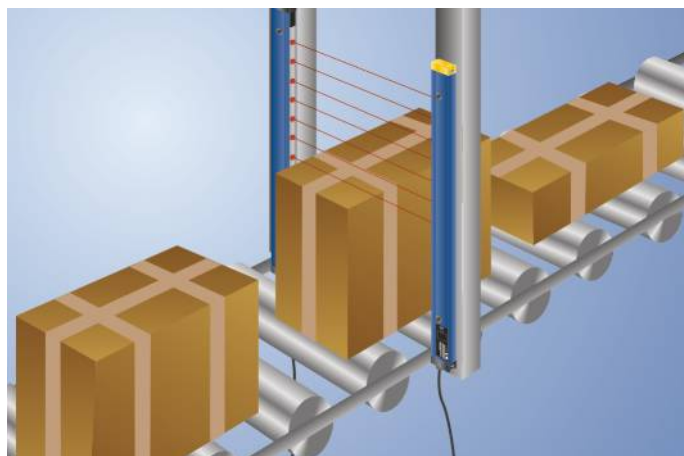
OEEB183U0135

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

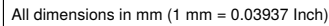
Optical Data	
Range	3000 mm
Measurement Field Height (MFH)	1800 mm
Beam Distance	30 mm
Light Source	Infrared Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	10 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 50 mA
Switching Frequency	8 Hz
Response Time	62 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
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
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	74,66 a
PNP NC	●
IO-Link	●
Connection Diagram No.	188
Control Panel No.	EB3
Suitable Connection Equipment No.	2 35

Suitable Emitter

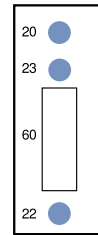
OSEB183Z0103
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

Complementary Products

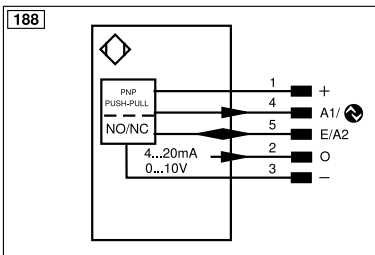
Analog Evaluation Unit AW02
IO-Link Master
Software



EB3



```
20 = Enter key
22 = Up key
23 = Down key
60 = display
```



Legend					
+	Supply Voltage +	nc	Not connected	EN _{BRG422}	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	EN _A	Encoder A
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted	EN _B	Encoder B
A	Switching Output (NO)	W	Trigger Input	AM _{IN}	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AM _{AX}	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
Ṽ	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	AM _v	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 DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization		
RDY	Ready	E+	Receiver-Line		
GND	Ground	S+	Emitter-Line		
CL	Clock	±	Grounding		
E/A	Output/Input programmable	SnR	Switching Distance Reduction		
	IO-Link	Rx+/-	Ethernet Receive Path		
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	YE	Yellow
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	GN	Green
OSSD	Safety Output	La	Emitted Light disengageable	BU	Blue
Signal	Signal Output	Mag	Magnet activation	VT	Violet
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	GY	Grey
EN ₀ RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contact or Monitoring	WH	White
PT	Platinum measuring resistor	EN _{ARs422}	Encoder A/Ā (TTL)	PK	Pink
				GN _{YE}	Green/Yellow