Through-Beam Sensor

E1FL66VD

Part Number

- **Integrated output**
- **Rear panel mounting**
- **Recognition of small parts**

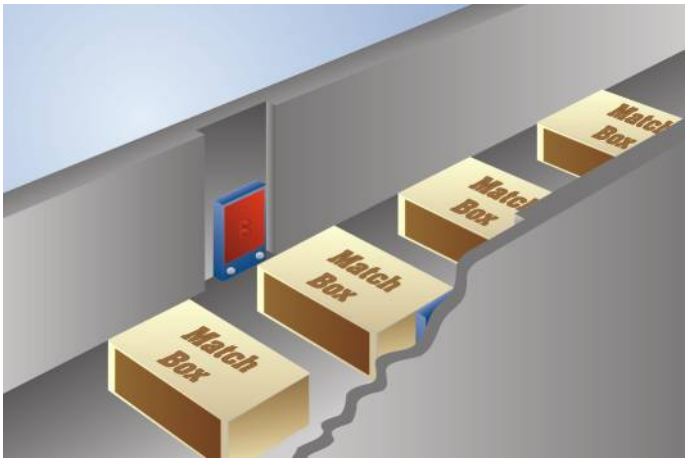
Technical Data

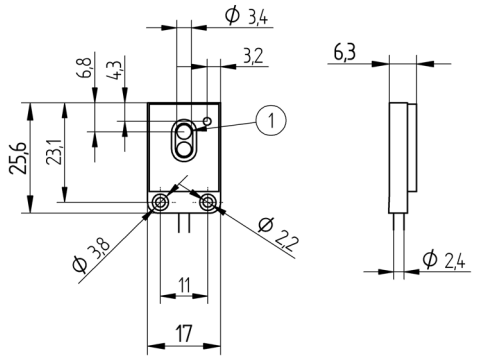
Optical Data	
Range	1000 mm
Switching Hysteresis	< 15 %
Light Source	Infrared Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	30 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 30 mA
Switching Frequency	500 Hz
Response Time	1 ms
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 µA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Plastic
Degree of Protection	IP67
Connection	Cable, 3-wire, 2 m
PNP NC	●
Connection Diagram No.	206
Control Panel No.	Lo1

Suitable Emitter

S1FL66

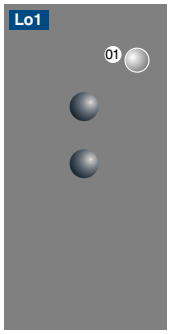
These through-beam sensors are best suited for use in industrial environments. Thanks to their large working range, the devices demonstrate excellent functional reliability in highly contaminated environments. The sensors can be checked for correct functioning via the test input.



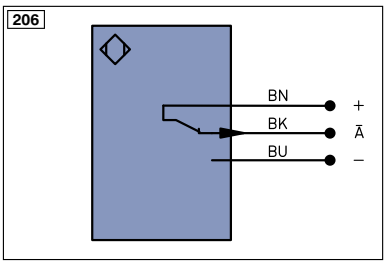


1 = Emitter / Receiver
Screw M2 = 0,3 Nm
All dimensions in mm (1 mm = 0.03937 Inch)

Optic



01 = Switching Status Indicator



Legend

+	Supply Voltage +	
–	Supply Voltage 0 V	
~	Supply Voltage (AC Voltage)	
A	Switching Output	(NO)
Ā	Switching Output	(NC)
V	Contamination/Error Output	(NO)
V̄	Contamination/Error Output	(NC)
E	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	
OSSD	Safety Output	
Signal	Signal Output	
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	
EN0 RS422	Encoder 0-pulse 0-0̄ (TTL)	
PT	Platinum measuring resistor	
nc	not connected	
U	Test Input	
Ū	Test Input inverted	
W	Trigger Input	
W–	Ground for the Trigger Input	
O	Analog Output	
O–	Ground for the Analog Output	
BZ	Block Discharge	
AMV	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	
⏚	Grounding	
SnR	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	Contactor Monitoring	
ENA RS422	Encoder A/Ā (TTL)	
ENB RS422	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 DIN IEC 757

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