

SEFB413

Part Number



- Increased safety thanks to intelligent muting functions
- Multifunctional thanks to measuring function
- Simple configuration and diagnosis with wTech2 software

The multi-light array can be attached anywhere thanks to the T slot and mounting bracket. The visible red light and signal strength display make it easy to align the emitter and the receiver. Safety mode, restart inhibit and contactor monitoring are included as standard functions. The user-friendly IO-Link and wenglor software wTech2 are used for configuration. In addition, safety light arrays provide various muting features for transporting material through hazardous areas. Optional LED signal indicators visualize the various muting phases.



Technical Data

Optical Data	
Range	0,5...50 m
Beam Distance	400 mm
Number of Beams	3
Light Source	Red Light
Wavelength	630 nm
Max. Ambient Light	10000 Lux
Opening Angle	± 2,5 °

Electrical Data	
Sensor Type	Set
Supply Voltage	19,2...28,8 V DC
Current Consumption (U _b = 24 V)	≤ 350 mA
Response Time	15 ms
Temperature Range	-30...55 °C
Storage temperature	-30...70 °C
No. Safety Outputs (OSSDs)	2
Safety Output Voltage Drop	≤ 2,3 V
PNP Safety Output/Switching Current	≤ 300 mA
Number of Signal Outputs	1
Signal Output Voltage Drop	≤ 2,5 V
Signal Output/Switching Current	≤ 100 mA
Short Circuit and Overload Protection	yes
Interface	IO-Link V1.1
Protection Class	III

Mechanical Data	
Housing Material	Aluminum
Disc Material	Polycarbonate
Degree of Protection	IP65/IP67
Connection	M12 × 1; 8-pin

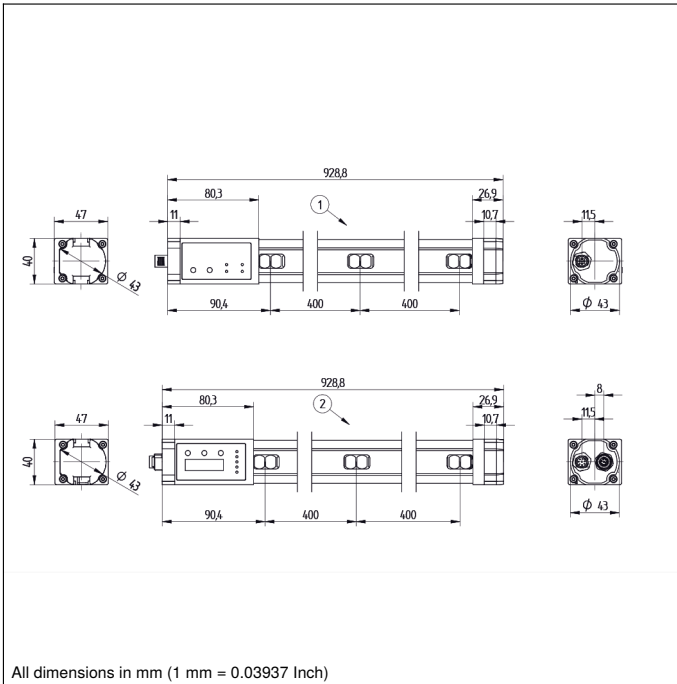
Safety-relevant Data	
ESPE Type (EN 61496)	4
Performance Level (EN ISO 13849-1)	Cat. 4 PL e
PFHD	≤ 1.8 × 10 ⁻⁸
Mission Time TM (EN ISO 13849-1)	20 a
Safety Integrity Level (EN 61508)	SIL3
Safety Integrity Level (EN 62061)	SILCL3

Function	
Body Protection	yes
Scope of functions	Muting
Scope of delivery	ZEFX001 mounting
Scope of delivery (Emitter; Receiver)	SEFB513; SEFB613

IO-Link	●
Connection Diagram No.	1029 1030 1031
Control Panel No.	A38 A39
Suitable Connection Equipment No.	35 89
Suitable Mounting Technology No.	860 870 880

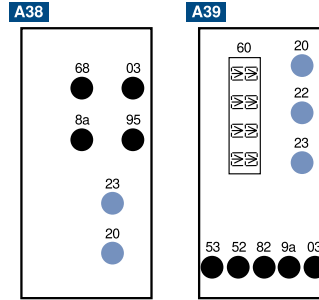
Complementary Products

Connection box for muting sensors
IO-Link Master
Muting Sensor Set
Path-Folding Mirror Z2UG001
Protection Column with Path-Folding Mirror SZ000EU125NN01
Protection column with protective screen Z2SS001
Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S
Set of LED signal indicators Z99G014
Software

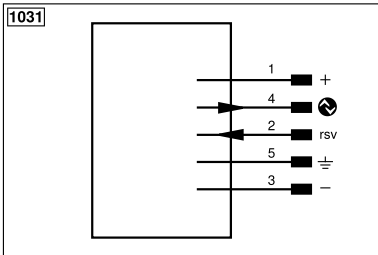
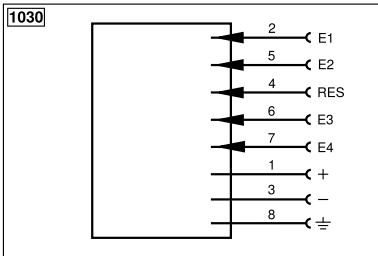
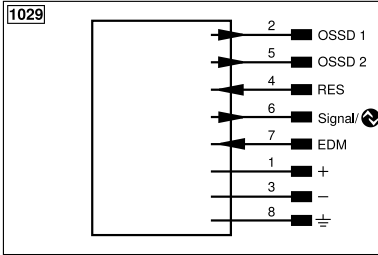


All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



- 03 = Error Indicator
- 20 = Enter key
- 22 = Up key
- 23 = Down key
- 52 = OSSD ON
- 53 = OSSD OFF
- 60 = display
- 68 = supply voltage indicator
- 82 = Acknowledgement Request
- 8a = coding
- 95 = Diagnosis/Large Detection Range
- 9a = weak signal



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
V̄	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
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
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
Wire Colors according to DIN 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

