SEFB513

Part Number

- **Increased safety thanks to intelligent muting functions**
- **Multifunctional thanks to measuring function**
- **Quick duplication of settings via microSD memory card**
- **Simple configuration and diagnosis with wTeach2 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 wTeach2 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

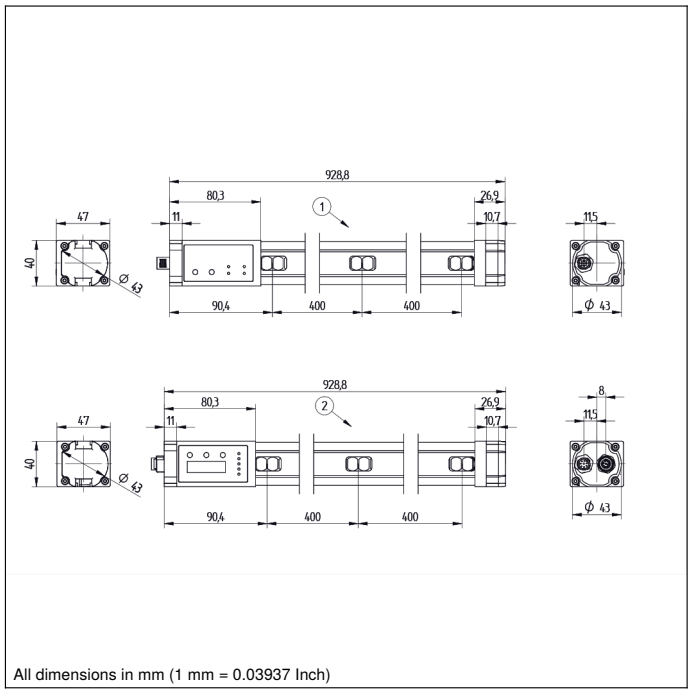
Optical Data	
Range	0,5...50 m
Beam Distance	400 mm
Number of Beams	3
Light Source	Red Light
Wavelength	630 nm
Opening Angle	± 2,5 °
Electrical Data	
Sensor Type	Emitter
Supply Voltage	19,2...28,8 V DC
Current Consumption (Ub = 24 V)	≤ 100 mA
Temperature Range	-30...55 °C
Storage temperature	-30...70 °C
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Aluminum
Disc Material	Polycarbonate
Degree of Protection	IP65/IP67
Connection	M12 × 1; 5-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
IO-Link	●
Connection Diagram No.	1031
Control Panel No.	A38
Suitable Connection Equipment No.	2 35
Suitable Mounting Technology No.	860 870 880

Suitable Receiver

SEFB613
SEFB623

Complementary Products

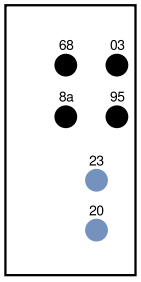
Path-Folding Mirror Z2UG001
Protection Column with Path-Folding Mirror SZ000EU125NN01
Protection column with protective screen Z2SS001



All dimensions in mm (1 mm = 0.03937 Inch)

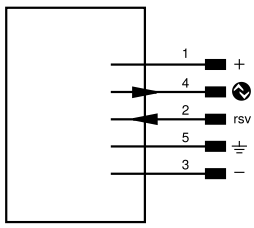
Ctrl. Panel

A38



03 = Error Indicator
68 = supply voltage indicator
8a = coding
95 = Diagnosis/Large Detection Range

1031



Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
–	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENB	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W–	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
V̄	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	AMV	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	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	ower over Ethernet	Tx+/–	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(–)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
BI_D+/–	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		