

# Through-Beam Sensor

## SW983

Part Number



- Special alignment optic
- Test input

### Technical Data

#### Optical Data

Range	10000 mm
Light Source	Red Light
Service Life (T = +25 °C)	100000 h
Opening Angle	6 °

#### Electrical Data

Sensor Type	Emitter
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Reverse Polarity Protection	yes
Protection Class	III

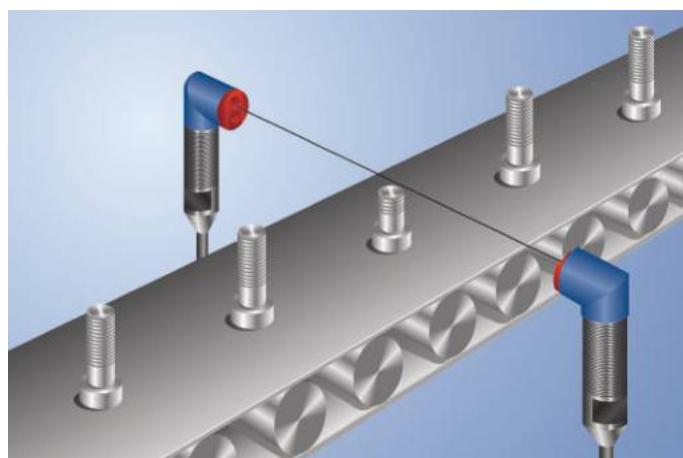
#### Mechanical Data

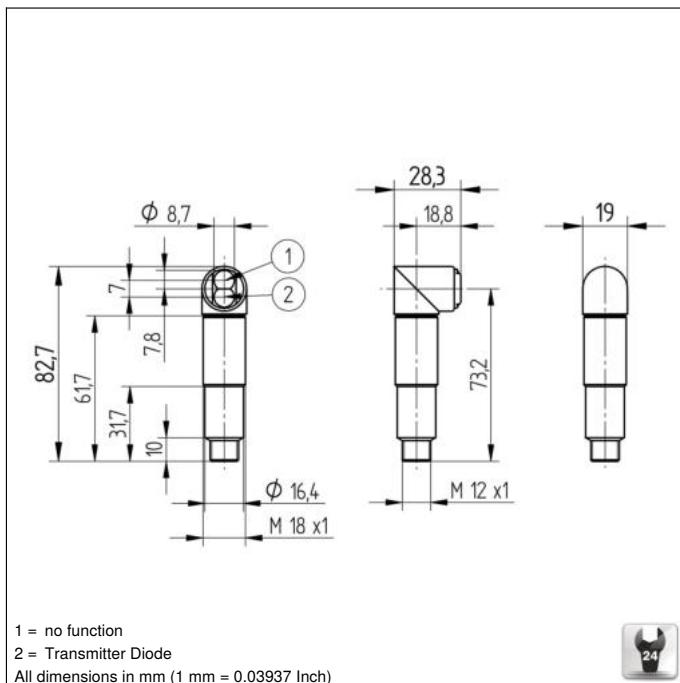
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 x 1; 4-pin
Connection Diagram No.	1018
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	150

### Suitable Receiver

EW98PC3

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.

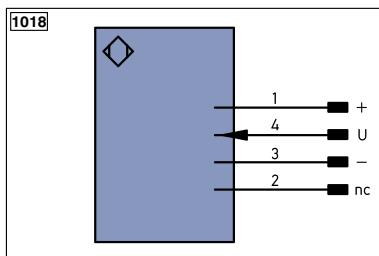




1 = no function

2 = Transmitter Diode

All dimensions in mm (1 mm = 0.03937 Inch)


**Legend**

	Supply Voltage +		Platinum measuring resistor
	Supply Voltage 0 V		not connected
	Supply Voltage (AC Voltage)		Test Input
	Switching Output (NO)		Test Input inverted
	Switching Output (NC)		Trigger Input
	Contamination/Error Output (NO)		Ground for the Trigger Input
	Contamination/Error Output (NC)		Analog Output
	Input (analog or digital)		Digital output MIN
	Teach Input		Digital output MAX
	Time Delay (activation)		Digital output OK
	Shielding		Synchronization
RxD	Interface Receive Path		Ground for the Synchronization
TxD	Interface Send Path		Receiver-Line
RDY	Ready		Emitter-Line
GND	Ground		Grounding
CL	Clock		Switching Distance Reduction
E/A	Output/Input programmable		Ethernet Receive Path
	IO-Link		Ethernet Send Path
PoE	Power over Ethernet		Interfaces-Bus A(+)B(-)
IN	Safety Input		Emitted Light disengageable
SSD	Safety Output		Magnet activation
Signal	Signal Output		Input confirmation
BLD	Ethernet Gigabit bidirect. data line (A-D)		Contactor Monitoring
EN0RS422	Encoder 0-pulse 0-0 (TTL)		

EN0RS422 Encoder A/A (TTL)

EN0RS422 Encoder B/B (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

