

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 (U _b = 24 V)	< 40 mA
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Reverse Polarity Protection	yes
Protection Class	III

Mechanical Data

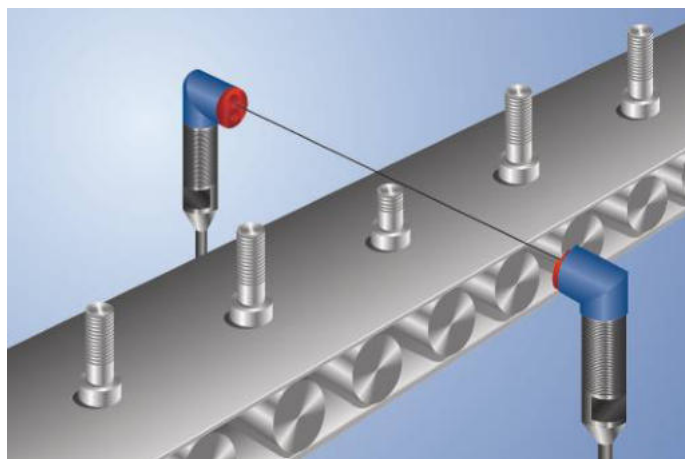
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin

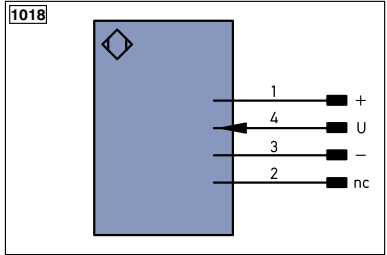
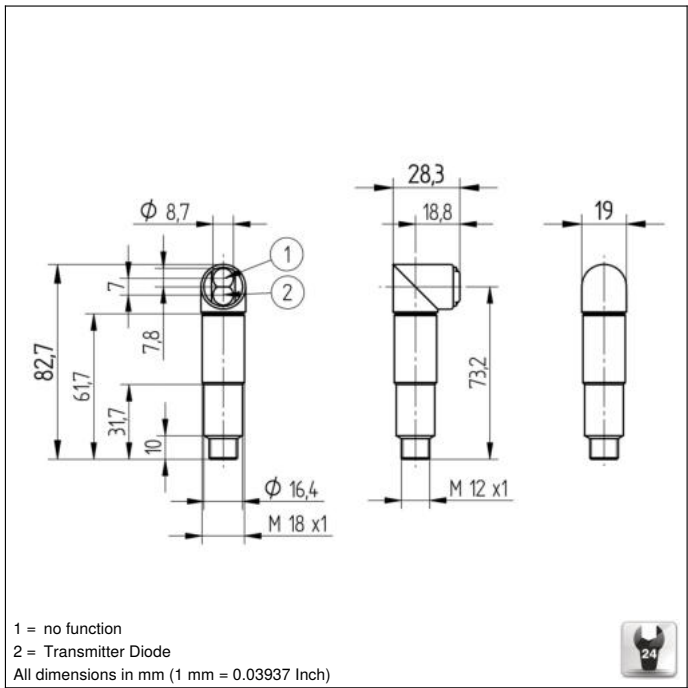
Connection Diagram No.	1018
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	150

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.





Legend

+	Supply Voltage +
-	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
\bar{A}	Switching Output (NC)
V	Contamination/Error Output (NO)
\bar{V}	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-PS42	Encoder 0-pulse 0-0 (TTL)

PT	Platinum measuring resistor
nc	not connected
U	Test Input
\bar{U}	Test Input inverted
W	Trigger Input
W-	Ground for the Trigger Input
O	Analog Output
O-	Ground for the Analog Output
BZ	Block Discharge
AWV	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
\pm	Grounding
S _n R	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(-)
L _a	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contacting Monitoring

ENAR542	Encoder A/ \bar{A} (TTL)
ENBPS42	Encoder B/ \bar{B} (TTL)
EN _A	Encoder A
EN _B	Encoder B
A _{MIN}	Digital output MIN
A _{MAX}	Digital output MAX
A _{OK}	Digital output OK
SY _{in}	Synchronization In
SY _{OUT}	Synchronization OUT
OL _T	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

