## **Through-Beam Sensor**

EW98PC3

Part Number



Special alignment optic

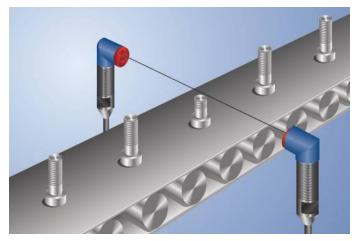
## **Technical Data**

Range         10000 mm           Switching Hysteresis         <15 %           Light Source         Red Light           Service Life (T = +25 °C)         100000 h           Max. Ambient Light         10000 Lux           Opening Angle         6 °           Electrical Data         5           Sensor Type         Receiver           Supply Voltage         1030 V DC           Current Consumption (Ub = 24 V)         <40 mA           Switching Frequency         150 Hz           Response Time         3300 μs           Temperature Drift         <10 %           Temperature Range         1060 °C           Switching Output Voltage Drop         <2,5 V           PNP Switching Output/Switching Current         200 mA           Residual Current Switching Output         <50 μA           Short Circuit and Overload Protection         yes           Protection Class         III           Mechanical Data         Stainless Steel           Full Encapsulation         yes           Degree of Protection         IP67           Connection Diagram No.         ID13           Control Panel No.         D5           Suitable Connection Equipment No.         2	Optical Data	
Light SourceRed LightService Life (T = +25 °C)100000 hMax. Ambient Light10000 LuxOpening Angle6 °Electrical Data5Sensor TypeReceiverSupply Voltage1030 V DCCurrent Consumption (Ub = 24 V)< 40 mA	Range	10000 mm
Service Life (T = +25 °C)10000 hMax. Ambient Light10000 LuxOpening Angle6 °Electrical Data5Sensor TypeReceiverSupply Voltage1030 V DCCurrent Consumption (Ub = 24 V)< 40 mA	Switching Hysteresis	< 15 %
Max. Ambient Light10000 LuxOpening Angle6 °Electrical DataSensor TypeSensor TypeReceiverSupply Voltage1030 V DCCurrent Consumption (Ub = 24 V)< 40 mA	Light Source	Red Light
Opening Angle6 °Electrical DataSensor TypeReceiverSupply Voltage1030 V DCCurrent Consumption (Ub = 24 V)< 40 mA	Service Life (T = +25 °C)	100000 h
Electrical DataSensor TypeReceiverSupply Voltage1030 V DCCurrent Consumption (Ub = 24 V)< 40 mA	Max. Ambient Light	10000 Lux
Sensor TypeReceiverSupply Voltage1030 V DCCurrent Consumption (Ub = 24 V)< 40 mA	Opening Angle	6 °
Supply Voltage1030 V DCCurrent Consumption (Ub = 24 V)< 40 mA	Electrical Data	
Current Consumption (Ub = 24 V)< 40 mASwitching Frequency150 HzResponse Time3300 µsTemperature Drift< 10 %	Sensor Type	Receiver
Switching Frequency150 HzResponse Time3300 µsTemperature Drift< 10 %	Supply Voltage	1030 V DC
Response Time3300 µsTemperature Drift< 10 %	Current Consumption (Ub = 24 V)	< 40 mA
Temperature Drift< 10 %	Switching Frequency	150 Hz
Temperature Range-1060 °CSwitching Output Voltage Drop< 2,5 V	Response Time	3300 µs
Switching Output Voltage Drop< 2,5 VPNP Switching Output/Switching Current200 mAResidual Current Switching Output< 50 µA	Temperature Drift	< 10 %
PNP Switching Output/Switching Current200 mAResidual Current Switching Output< 50 μA	Temperature Range	-1060 °C
Residual Current Switching Output< 50 µA	Switching Output Voltage Drop	< 2,5 V
Short Circuit and Overload ProtectionyesReverse Polarity ProtectionyesProtection ClassIIIMechanical DataIIISetting MethodPotentiometerHousing MaterialStainless SteelFull EncapsulationyesDegree of ProtectionIP67ConnectionM12 × 1; 4-pinPNP NO/NC switchableI013Connection Diagram No.I013Control Panel No.D5Suitable Connection Equipment No.2	PNP Switching Output/Switching Current	200 mA
Reverse Polarity Protection     yes       Protection Class     III       Mechanical Data     III       Setting Method     Potentiometer       Housing Material     Stainless Steel       Full Encapsulation     yes       Degree of Protection     IP67       Connection     M12 × 1; 4-pin       PNP NO/NC switchable     I013       Connection Diagram No.     I013       Control Panel No.     D5       Suitable Connection Equipment No.     2	Residual Current Switching Output	< 50 µA
Protection Class     III       Mechanical Data     Setting Method       Setting Method     Potentiometer       Housing Material     Stainless Steel       Full Encapsulation     yes       Degree of Protection     IP67       Connection     M12 × 1; 4-pin       PNP NO/NC switchable     Image: Connection Diagram No.       Control Panel No.     D5       Suitable Connection Equipment No.     2	Short Circuit and Overload Protection	yes
Mechanical Data         Setting Method       Potentiometer         Housing Material       Stainless Steel         Full Encapsulation       yes         Degree of Protection       IP67         Connection       M12 × 1; 4-pin         PNP NO/NC switchable <ul> <li>Connection Diagram No.</li> <li>1013</li> <li>Control Panel No.</li> <li>D5</li> <li>Suitable Connection Equipment No.</li> <li>2</li> </ul>	Reverse Polarity Protection	yes
Setting MethodPotentiometerHousing MaterialStainless SteelFull EncapsulationyesDegree of ProtectionIP67ConnectionM12 × 1; 4-pinPNP NO/NC switchable•Connection Diagram No.1013Control Panel No.D5Suitable Connection Equipment No.2	Protection Class	III
Housing Material     Stainless Steel       Full Encapsulation     yes       Degree of Protection     IP67       Connection     M12 × 1; 4-pin       PNP NO/NC switchable     Image: Connection Diagram No.       Control Panel No.     D5       Suitable Connection Equipment No.     2	Mechanical Data	
Full Encapsulation     yes       Degree of Protection     IP67       Connection     M12 × 1; 4-pin       PNP NO/NC switchable     Image: Connection Diagram No.       Control Panel No.     Image: Display the second se	Setting Method	Potentiometer
Degree of Protection     IP67       Connection     M12 × 1; 4-pin       PNP NO/NC switchable     •       Connection Diagram No.     1013       Control Panel No.     D5       Suitable Connection Equipment No.     2	Housing Material	Stainless Steel
Connection     M12 × 1; 4-pin       PNP NO/NC switchable     Image: Connection Diagram No.       Control Panel No.     Image: D5       Suitable Connection Equipment No.     2	Full Encapsulation	yes
PNP NO/NC switchable       Connection Diagram No.       Control Panel No.       Suitable Connection Equipment No.       2	Degree of Protection	IP67
Connection Diagram No.     1013       Control Panel No.     D5       Suitable Connection Equipment No.     2	Connection	M12 × 1; 4-pin
Control Panel No.     D5       Suitable Connection Equipment No.     2	PNP NO/NC switchable	
Suitable Connection Equipment No. 2	Connection Diagram No.	1013
	Control Panel No.	D5
Suitable Mounting Technology No.	Suitable Connection Equipment No.	2
	Suitable Mounting Technology No.	150

## Suitable Emitter

SW983

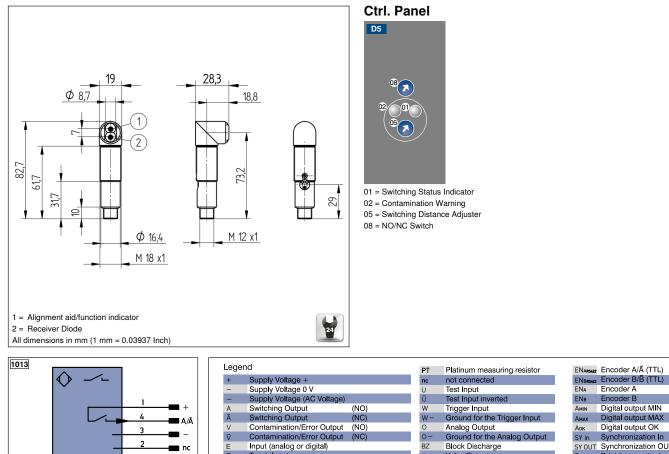
These through-beam sensors are best suited for use in industrial environments. Thanks to their large working range, the devices demonstrate excellent functional reliability in highly contaminated environments. The sensors can be checked for correct functioning via the test input.



Complementary Products PNP-NPN Converter BG2V1P-N-2M

**Photoelectronic Sensors** 





0-

R7

Awv

SY-

SnR

La

Mag RES

EDM

E+

Block Discharge Valve Output Valve Control Output + Valve Control Output 0 V

Ground for the Synchronization

Grounding Switching Distance Reduction

Interfaces-Bus A(+)/B(–) Emitted Light disengageable

Synchronization

Receiver-Line

Emitter-Line

Rx+/- Ethernet Receive Path

Magnet activation

Input confirmation

Contactor Monitoring

Tx+/- Ethernet Send Path

V

E T

Z S

RDY

E/A

0

IN

Teach Input Time Delay (activation)

Shielding Interface Receive Path 
 RxD
 Interface Receive Pa

 TxD
 Interface Send Path

Output/Input program

BLD+/- Ethernet Gigabit bidirect. data line (A-D) ENorsez Encoder 0-pulse 0-0 (TTL)

Ready

IO-Link

Signal Signal Output

PoF Power over Ethernet

Safety Input OSSD Safety Output

GND Ground CL Clock

2

nc

AUK	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
0. Brightness output	
м	Maintenance
rsv	reserved
Wire Co	olors 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

