

Through-Beam Sensor

SN2003

Part Number



- Glass lenses
- Test input

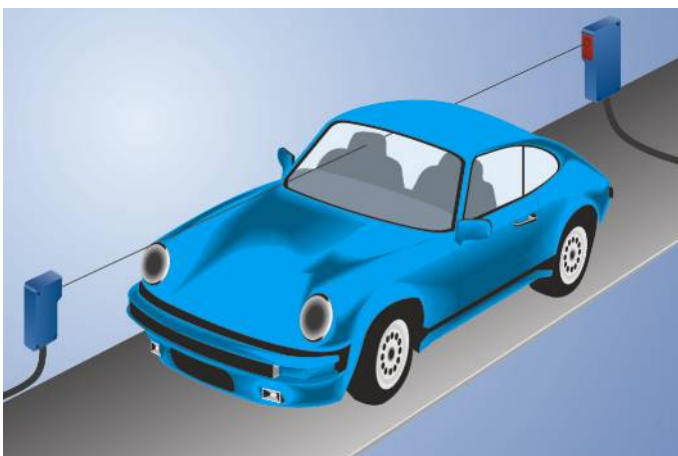
Technical Data

Optical Data	
Range	20000 mm
Light Source	Red Light
Service Life (T = +25 °C)	100000 h
Opening Angle	4 °
Electrical Data	
Sensor Type	Emitter
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 20 mA
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
Connection Diagram No.	1018
Control Panel No.	K3 No3
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	350

Suitable Receiver

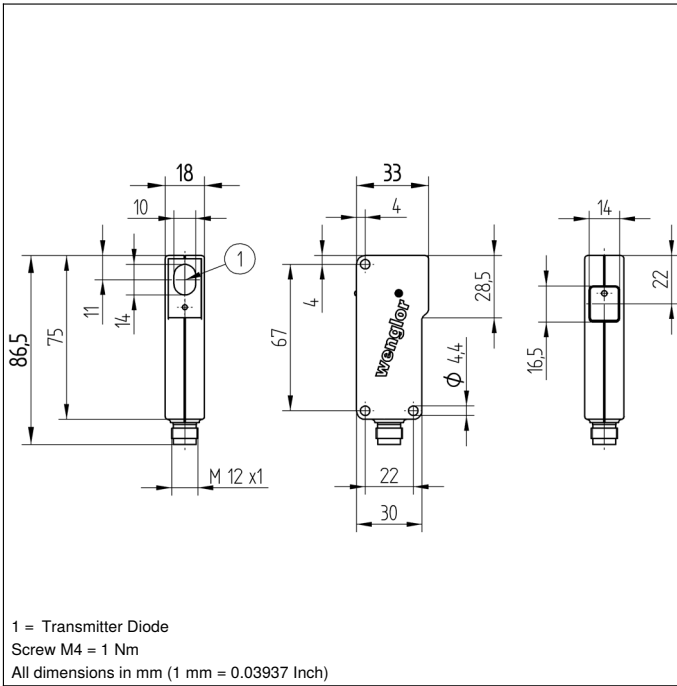
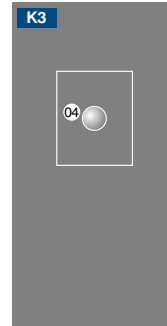
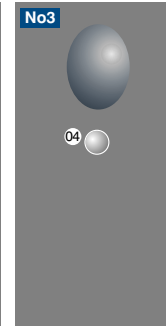
EN200PA3

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.

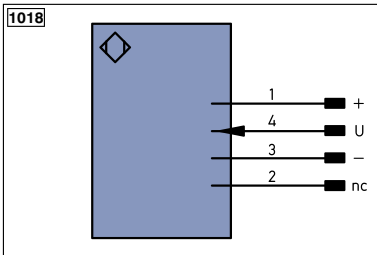



Complementary Products

Dust Extraction Tube STAUBTUBUS-03
Set Protective Housing ZSN-NN-02


Ctrl. Panel

Optic


04 = Function Indicator


Legend

+ Supply Voltage +	PT Platinum measuring resistor	EN^ARS422 Encoder A/Ā (TTL)
- Supply Voltage 0 V	nc not connected	EN^BRS422 Encoder B/B̄ (TTL)
~ Supply Voltage (AC Voltage)	U Test Input	EN^A Encoder A
A Switching Output (NO)	Ū Test Input inverted	EN^B Encoder B
Ā Switching Output (NC)	W Trigger Input	A_{MIN} Digital output MIN
V Contamination/Error Output (NO)	W- Ground for the Trigger Input	A_{MAX} Digital output MAX
Ṽ Contamination/Error Output (NC)	O Analog Output	A_{OK} Digital output OK
E Input (analog or digital)	O- Ground for the Analog Output	SY_{in} Synchronization In
T Teach Input	BZ Block Discharge	SY_{OUT} Synchronization OUT
Z Time Delay (activation)	A_{WV} Valve Output	OL_T Brightness output
S Shielding	a Valve Control Output +	M Maintenance
RxD Interface Receive Path	b Valve Control Output 0 V	rsv reserved
TxD Interface Send Path	SY Synchronization	Wire Colors according to DIN IEC 757
RDY Ready	SY- Ground for the Synchronization	BK Black
GND Ground	E+ Receiver-Line	BN Brown
CL Clock	S+ Emitter-Line	RD Red
E/A Output/Input programmable	± Grounding	OG Orange
 IO-Link	S_{nR} Switching Distance Reduction	YE Yellow
PoE Power over Ethernet	Rx+/- Ethernet Receive Path	GN Green
IN Safety Input	Tx+/- Ethernet Send Path	BU Blue
OSSD Safety Output	Bus Interfaces-Bus A(+)/B(-)	VT Violet
Signal Signal Output	L_a Emitted Light disengageable	GY Grey
Bl_D+/- Ethernet Gigabit bidirect. data line (A-D)	Mag Magnet activation	WH White
EN⁰RS422 Encoder 0-pulse 0-0̄ (TTL)	RES Input confirmation	PK Pink
	EDM Contactor Monitoring	GN_{YE} Green/Yellow

