Through-Beam Sensor

EN600PA3

Part Number

- **Glass lenses**
- **Range: 60 m**

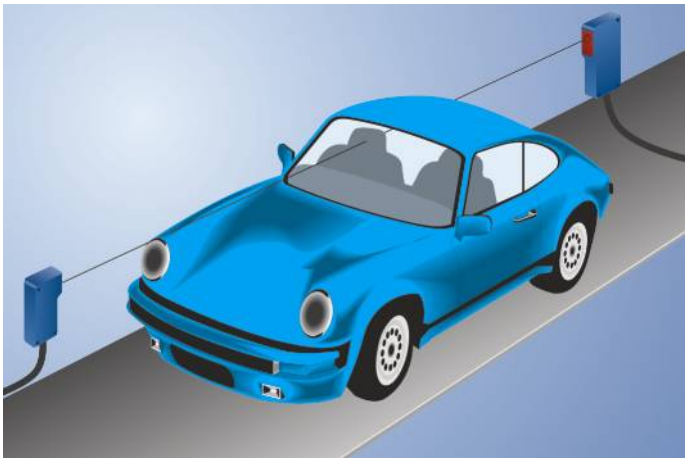
Technical Data

Optical Data	
Range	60000 mm
Smallest Recognizable Part	15 mm
Switching Hysteresis	< 15 %
Light Source	Red Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	5000 Lux
Opening Angle	4 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	15...30 V DC
Current Consumption (Ub = 24 V)	< 15 mA
Switching Frequency	100 Hz
Response Time	5 ms
Temperature Drift	< 10 %
Temperature Range	-30...55 °C
Switching Output Voltage Drop	< 1,5 V
PNP Switching Output/Switching Current	200 mA
Residual Current Switching Output	50 µA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Setting Method	Potentiometer
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	N1 No1
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	350

Suitable Emitter

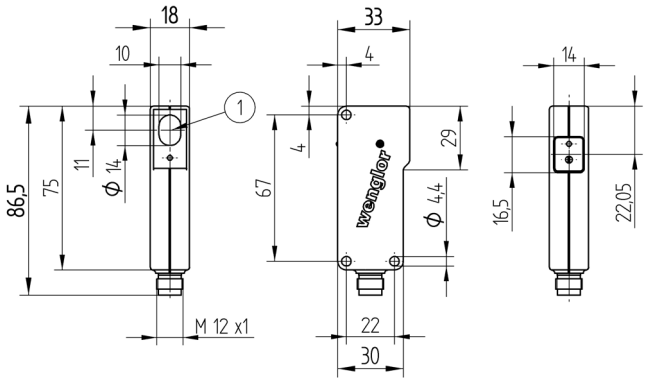
SN6003

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.



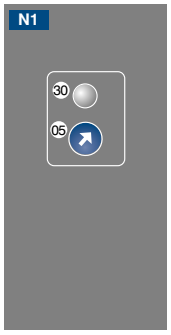
Complementary Products

Dust Extraction Tube STAUBTUBUS-03
PNP-NPN Converter BG2V1P-N-2M
Set Protective Housing ZSN-NN-02

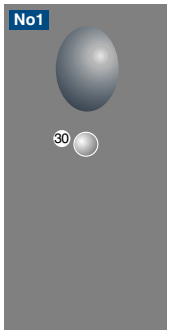


1 = Receiver Diode
Screw M4 = 1 Nm
All dimensions in mm (1 mm = 0.03937 Inch)

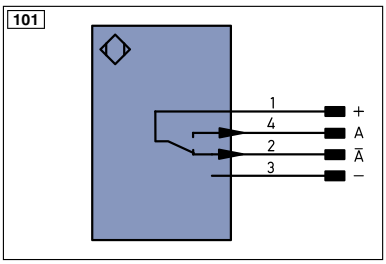
Ctrl. Panel



Optic



05 = Switching Distance Adjuster
30 = Switching Status/Contamination Warning



Legend

+	Supply Voltage +		PT	Platinum measuring resistor		ENA/RS422	Encoder A/Ā (TTL)
–	Supply Voltage 0 V		nc	not connected		ENB/RS422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)		U	Test Input		ENA	Encoder A
A	Switching Output	(NO)	Ū	Test Input inverted		ENB	Encoder B
Ā	Switching Output	(NC)	W	Trigger Input		AMIN	Digital output MIN
V	Contamination/Error Output	(NO)	W–	Ground for the Trigger Input		AMAX	Digital output MAX
V̄	Contamination/Error Output	(NC)	O	Analog Output		AOK	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)		AMV	Valve Output		OLT	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		SnR	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		La	Emitted Light disengageable		GY	Grey
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)		Mag	Magnet activation		WH	White
EN0/RS422	Encoder 0-pulse 0-0̄ (TTL)		RES	Input confirmation		PK	Pink
			EDM	Contactor Monitoring		GNYE	Green/Yellow