

Through-Beam Sensor

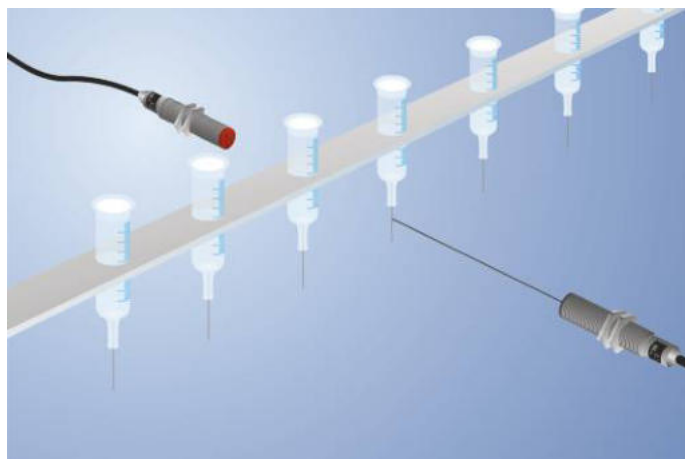
ZD600PCVT3 LASER

Part Number



- Range: 60 m
- Smallest recognizable part: 0,05 mm
- Teach-in

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.



Technical Data

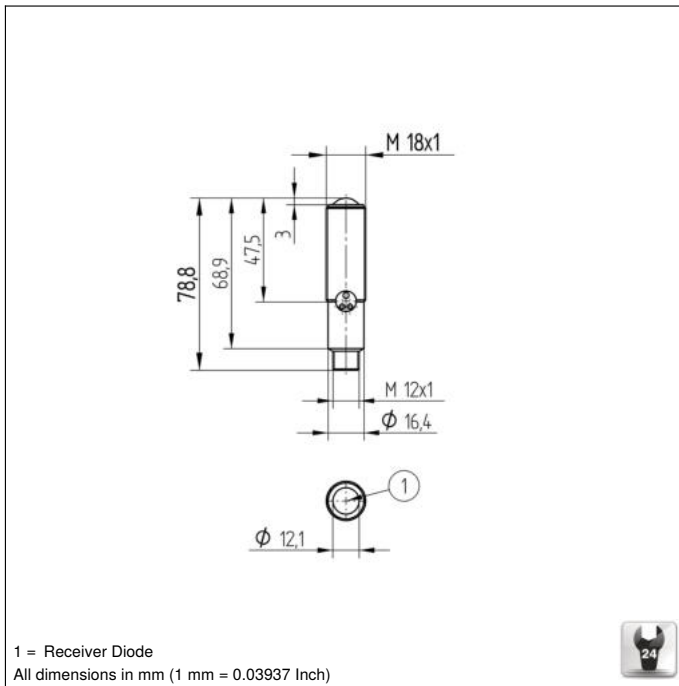
Optical Data	
Range	60000 mm
Smallest Recognizable Part	50 μ m
Switching Hysteresis	< 15 %
Light Source	Laser (red)
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	2
Max. Ambient Light	10000 Lux
Opening Angle	12 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 15 mA
Switching Frequency	5 kHz
Response Time	100 μ s
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	200 mA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Teach Mode	NT, MT
Protection Class	III
Mechanical Data	
Setting Method	Teach-In
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 $\times$ 1; 4-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	2413,71 a
Contamination Output	●
PNP NO/NC switchable	●
Connection Diagram No.	154
Control Panel No.	D7
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	150

Suitable Emitter

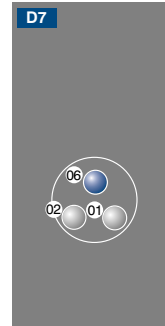
ZD6003

Complementary Products

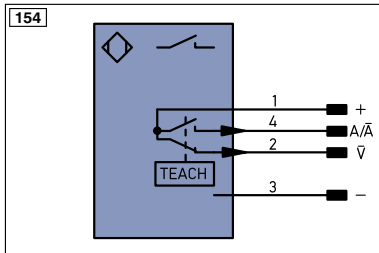
Dust Extraction Tube STAUBTUBUS-01
Lens LA7
PNP-NPN Converter BG2V1P-N-2M



Ctrl. Panel



01 = Switching Status Indicator
02 = Contamination Warning
06 = Teach Button



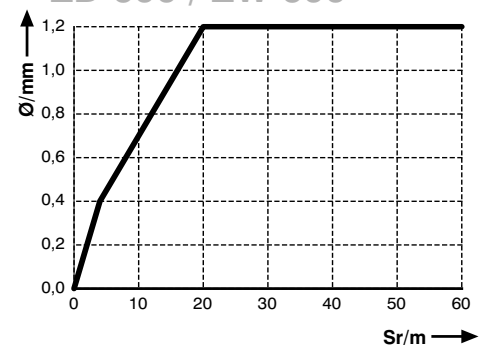
Legend

+	Supply Voltage +	PT	Platinum measuring resistor	ENAR542Z	Encoder A/Ä (TTL)
-	Supply Voltage 0 V	nc	not connected	ENB542Z	Encoder B/B (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENa	Encoder A
A	Switching Output (NO)	Ü	Test Input inverted	ENb	Encoder B
Ä	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
Ṽ	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)	AWV	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	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
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN0.542Z	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNYE	Green/Yellow

Smallest Recognizable Part

Based on the Distance between Emitter and Receiver

ZD 600 / ZW 600



Sr = Switching Distance

Ø = Diameter, Smallest Recognizable Part

