

# Through-Beam Sensor

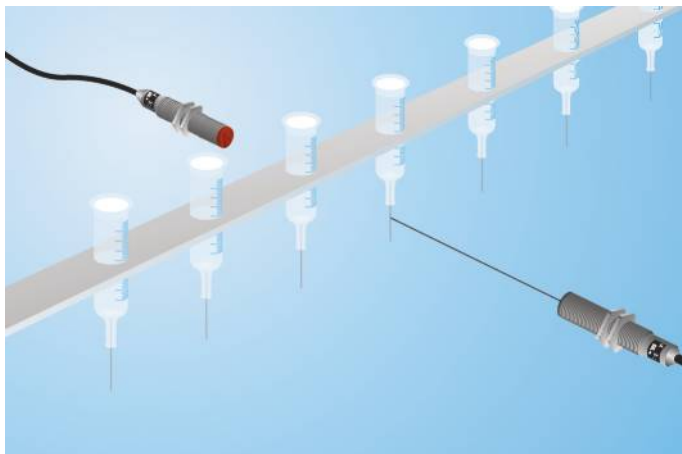
## ZD600PCT3

Part Number



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



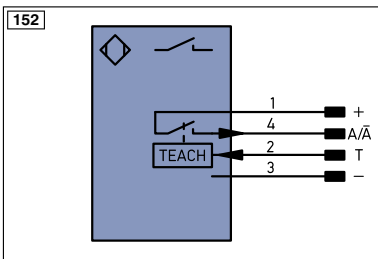
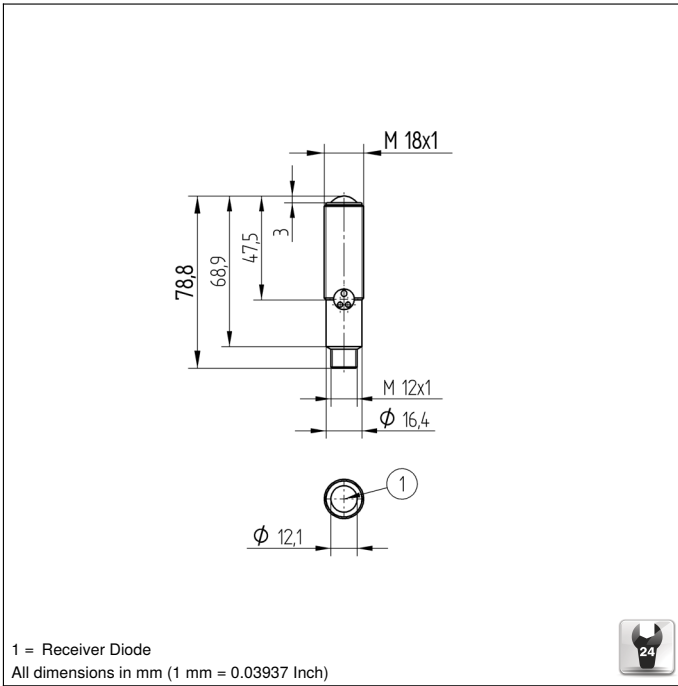
### Technical Data

Optical Data	
Range	60000 mm
Smallest Recognizable Part	> 50 μm
Switching Hysteresis	< 15 %
Light Source	Laser (red)
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	12 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 15 mA
Switching Frequency	5 kHz
Response Time	100 μs
On-/Off-Delay (RS-232)	0...5 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	
Adjustment	Teach-In
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
PNP NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	152
Control Panel No.	D7
Suitable Connection Technology No.	2
Suitable Mounting Technology No.	150   160

### Suitable Emitter

ZD6003





Legend		
+	Supply Voltage +	nc not connected
-	Supply Voltage 0 V	U Test Input
~	Supply Voltage (AC Voltage)	Ū Test Input inverted
A	Switching Output (NO)	W Trigger Input
Ā	Switching Output (NC)	O Analog Output
V	Contamination/Error Output (NO)	O- Ground for the Analog Output
Ṽ	Contamination/Error Output (NC)	BZ Block Discharge
E	Input (analog or digital)	AWV Valve Output
T	Teach Input	a Valve Control Output +
Z	Time Delay (activation)	b Valve Control Output 0 V
S	Shielding	SY Synchronization
RxD	Interface Receive Path	E+ Receiver-Line
TxD	Interface Send Path	S+ Emitter-Line
RDY	Ready	≡ Grounding
GND	Ground	S <sub>n</sub> R Switching Distance Reduction
CL	Clock	Rx+/- Ethernet Receive Path
E/A	Output/Input programmable	Tx+/- Ethernet Send Path
	IO-Link	Bus Interfaces-Bus A(+)/B(-)
PoE	Power over Ethernet	La Emitted Light disengageable
IN	Safety Input	Mag Magnet activation
OSSD	Safety Output	RES Input confirmation
Signal	Signal Output	EDM Contactor Monitoring

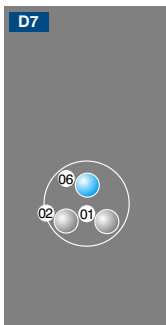
  

Wire Colors according to DIN IEC 757	
BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue
VT	Violet
GY	Grey
WH	White
PK	Pink
GNYE	Green Yellow

### Complementary Products

- Adapterbox A232
- Dust extraction tube STAUBTUBUS-01
- Lens LA7
- PNP-NPN Converter BG2V1P-N-2M

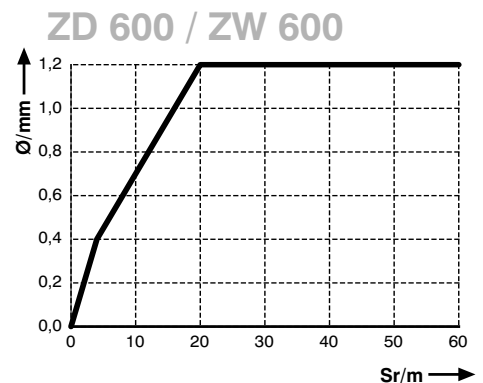
### Ctrl. Panel



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

### Smallest Recognizable Part

Based on the Distance between Emitter and Receiver



Sr = Switching Distance  
 Ø = Diameter, Smallest Recognizable Part