

Reflex Sensors

with Background Suppression

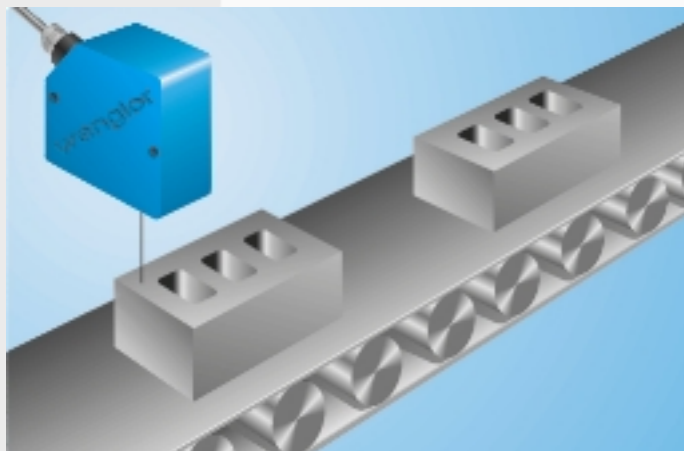
HT77PBV3

Part Number



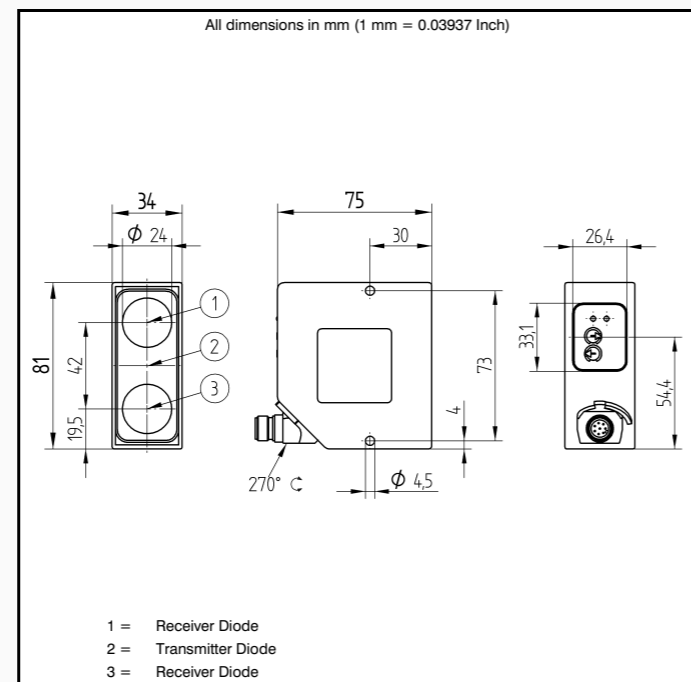
- Adjustable Time Delay
- Infrared Light
- Plug can be rotated
- Triple Beam Correction Principle

These sensors are particularly well suited for recognizing objects in front of any type of background. The color, shape and surface characteristics of the object have practically no influence on sensor switching performance.



Technical Data

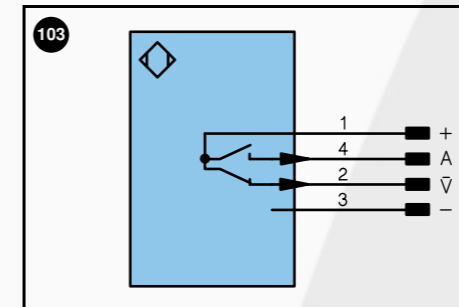
Optical Data	
Range	1500 mm
Switching Hysteresis	< 5 %
Light Source	Infrared Light
Service Life (T = +25°C)	100000 h
max. Ambient Light	10000 Lux
Light Spot Diameter	see Table 1
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	40 mA
Switching Frequency	300 Hz
Response Time	1700 μs
Time Delay	0...1 s
Temperature Drift	< 5 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 mA
Contamination Output Voltage Drop	< 2.5 V
PNP Contamination Output/Switching Current	50 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Housing	Plastic
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V



Specifications are subject to change without notice
17/03



Plug Version	Part Number
Contamination Output	●
PNP NO	●
Connection Diagram No.	103
Control Panel No.	T-1
Suitable Plug No.	1



Legend		Wire colors according to DIN IEC 757
+ Power supply "+"	U Test input	BK black
- Power supply "0V"	W Trigger input	BN brown
- Power supply (AC Voltage)	O Analog output (1,2,3,...)	RD red
A Switching output (1,2,3...) / NO	O- Ground for the analog output	OG orange
A Switching output (1,2,3...) / NC	BZ Block discharge	YE yellow
V Contamination / Error output (NO)	Aw Valve output	GN green
V Contamination / Error output (NC)	a Valve control output "+"	BU blue
E Input (analog or digital)	b Valve control output "0V"	VT violet
T Teach input	SY Synchronization	GY grey
Z Time delay (activation)	E+ Receiver-Line	WH white
S Shielding	S+ Emitter-Line	PK pink
RxD RS-232 receive path	⊕ Grounding	GNYE green yellow
TxD RS-232 send path		

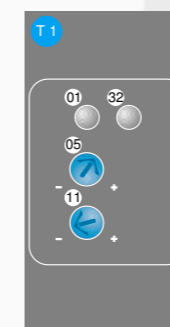
Table 1

Range	300 mm	800 mm	1500 mm
Light Spot Diameter	6 mm	18 mm	30 mm

Accessories

Mounting Bracket WT

Ctrl. Panel



- 01 = Switching Status Indicator
- 05 = Switching Distance Adjuster
- 11 = ON-Delay/ OFF-Delay Switch
- 32 = Contamination Warning/ Error Warning

Switching Distance Deviation

Typical characteristic curve based on Kodak white, 90%

