Reflex Sensors

with Background Suppression

HR12PCT2

Part Number

- **Easy to install**
- **Electronic Background Suppression**
- **Red Light**
- **Teach-In, external Teach-In, RS-232 Interface**

Technical Data

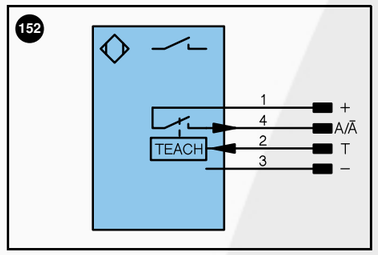
Optical Data	
Range	120 mm
Adjustable Range	35...120 mm
Switching Hysteresis	< 15 %
Light Source	Red Light
Service Life (T = +25°C)	100000 h
max. Ambient Light	10000 Lux
Light Spot Diameter	see Table 1
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24V)	< 40 mA
Switching Frequency	600 Hz
Response Time	833 µs
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Lockable	yes
Teach Mode	HT,VT
Mechanical Data	
Adjustment	Teach-In
Housing	Plastic
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V

Plug Version	
Part Number	HR12PCT2
PNP NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	152
Control Panel No.	M 3
Suitable Plug No.	2

50 V

Table 1

Range	60 mm	120 mm
Light Spot Diameter	2,5 mm	5 mm

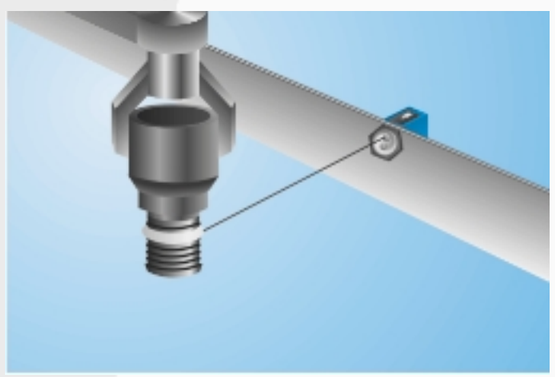


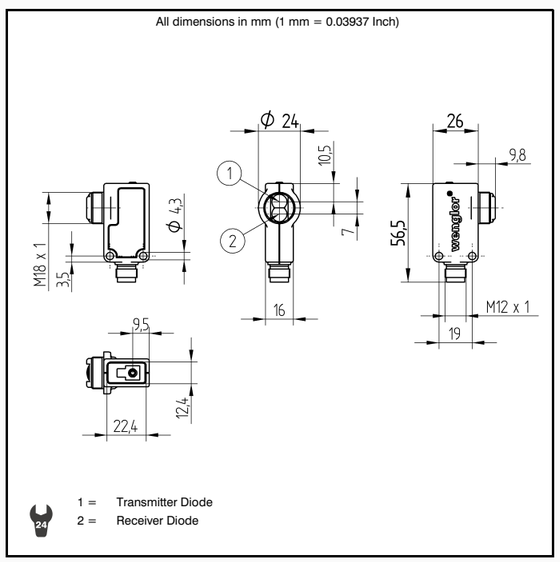
Legend

+	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
Ā	Switching output (1,2,3...) / NC	BZ	Block discharge	YE	yellow
V	Contamination / Error output (NO)	AW	Valve output	GN	green
V̄	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				

Wire colors according to DIN IEC 757

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. The sensor is easy to install with its integrated M18 threaded fixation, and can be easily protected as well.





Specifications are subject to change without notice

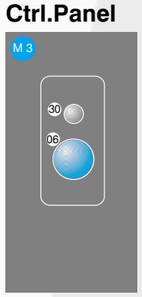
11/03

Accessories

Adapterbox A232

Mounting Bracket W18

Ctrl.Panel



06 = Teach Button

30 = Switching Status/Contamination Warning