

Print Mark Reader

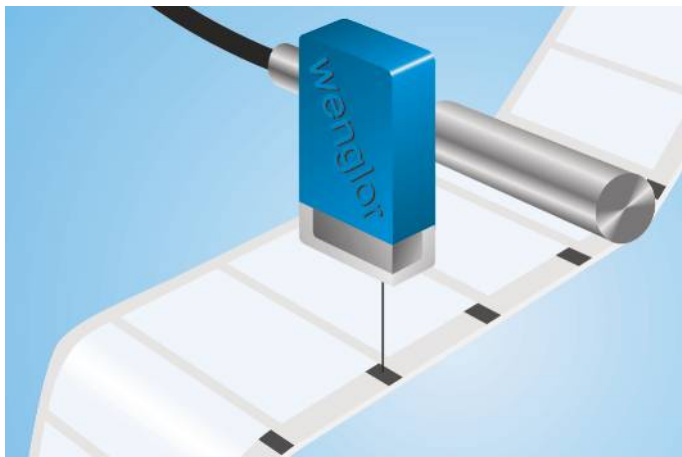
WM03PCT2

Part Number



- Compact housing
- Small light spot
- Teach-in, external teach-in
- White light for recognition of any print mark combinations

These sensors have been specially designed to recognize print marks. They have a very small spot and use a white light LED with long service life. Only one sensor is required for the recognition of all color combinations, as well as the difference in brightness between print marks and the background.



Technical Data

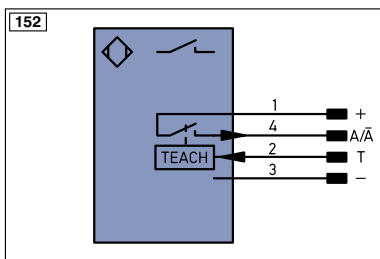
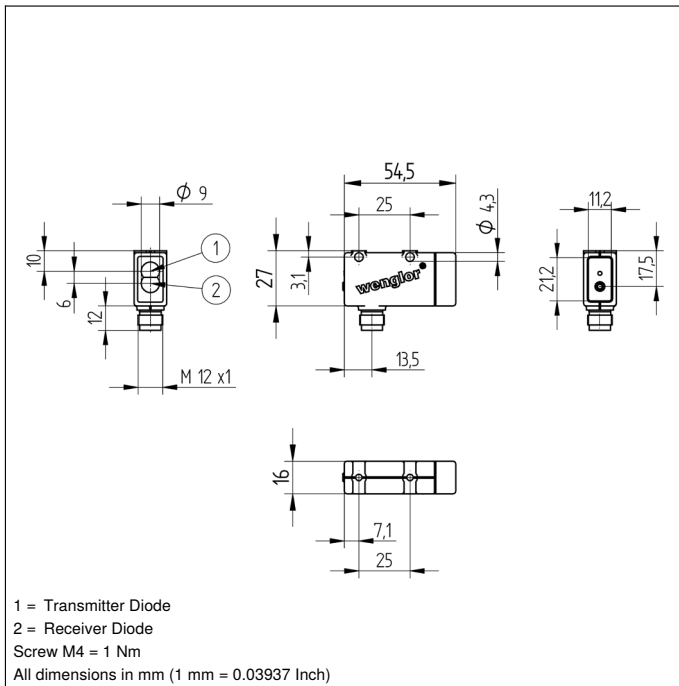
Optical Data	
Working Range	12...18 mm
Working Distance	15 mm
Resolution	20 Gray Scale
Switching Hysteresis	< 2 %
Light Source	White Light
Wave Length	400...700 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Light Spot Diameter	1,5 × 2,5 mm

Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 30 mA
Switching Frequency	5 kHz
Response Time	100 μs
On-/Off-Delay	20 ms
On-/Off-Delay (RS-232)	0...2 s
Temperature Drift	< 2 %
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	ZT, FT
Protection Class	III

Mechanical Data	
Adjustment	Teach-In
Housing Material	Plastic
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.	M7
Suitable Connection Technology No.	2
Suitable Mounting Technology No.	360





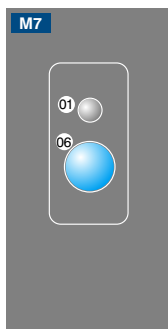
Legend		
+	Supply Voltage +	nc not connected
-	Supply Voltage 0 V	U Test Input
~	Supply Voltage (AC Voltage)	Ū Test Input inverted
A	Switching Output (NO)	W Trigger Input
Ā	Switching Output (NC)	O Analog Output
V	Contamination/Error Output (NO)	O- Ground for the Analog Output
Ṽ	Contamination/Error Output (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 _n 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

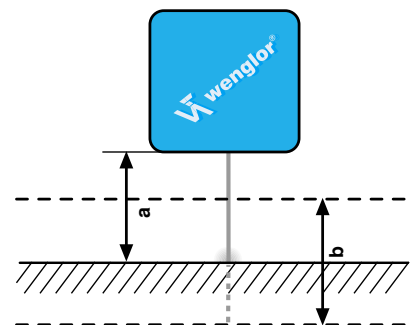
- Adapterbox A232
- Protection Housing Set ZSM-NN-02
- Protection Housing ZSV-0x-01

Ctrl. Panel



01 = Switching Status Indicator
 06 = Teach Button

Ideal Working Distance



a = Working Distance
 b = Working Range