

Gloss Sensors

LASER

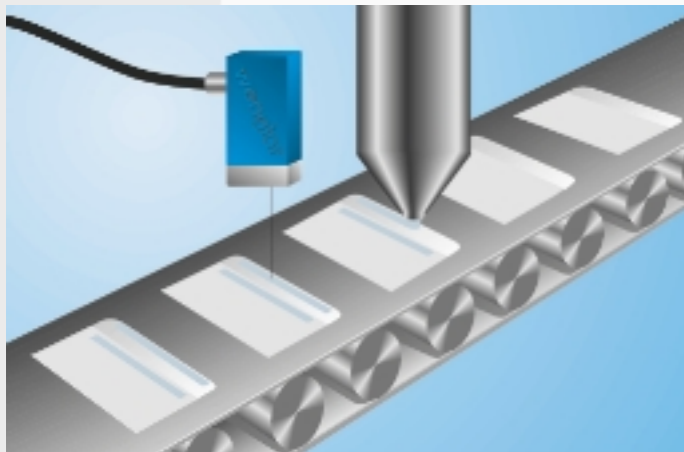
GM04VC2

Part Number



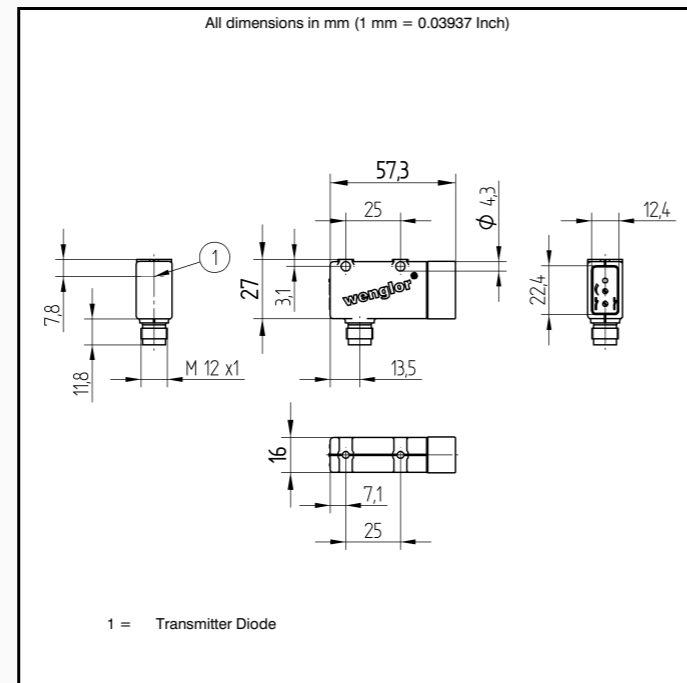
- Adjustable Gloss Level
- Practically independent of distance
- Reliable differentiation between glossy and matte objects

These sensors are capable of differentiating between surfaces with glossy and matte finishes. This allows for the monitoring of paint and adhesive layers, as well as drying status.



Technical Data

Optical Data	
Working Range	5...40 mm
Light Source	Laser (red)
Wave Length	670 nm
Service Life (T = +25°C)	50000 h
Laser Protection Class (EN 60825-1)	2
max. Ambient Light	10000 Lux
Light Spot Diameter	see Table 1
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	< 30 mA
Switching Frequency	1 kHz
Response Time	500 μs
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
Mechanical Data	
Adjustment	Potentiometer
Housing	Plastic
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V



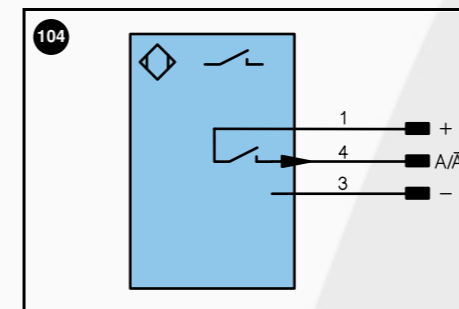
Specifications are subject to change without notice
18/03



Table 1

Remission from Object	> 30 %	~ 18 %	~ 6 %
Ideal Working Distance	20 mm	15 mm	10 mm
Working Range	+/- 15 mm	+/- 10 mm	+/- 5 mm
Light Spot Diameter	6 x 20 mm	4,5 x 15 mm	3 x 10 mm

Plug Version	Part Number
PNP NO/NC switchable	●
Connection Diagram No.	104
Control Panel No.	M 5
Suitable Plug No.	1

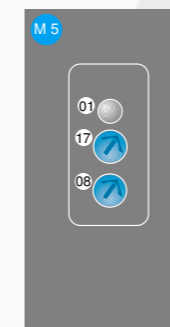


Legend		Wire colors according to DIN IEC 757
+	Power supply "+"	BK black
-	Power supply "0V"	BN brown
-	Power supply (AC Voltage)	RD red
A	Switching output (1,2,3...)/ NO	OG orange
A-bar	Switching output (1,2,3...)/ NC	YE yellow
V	Contamination / Error output (NO)	GN green
V-bar	Contamination / Error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

Accessories

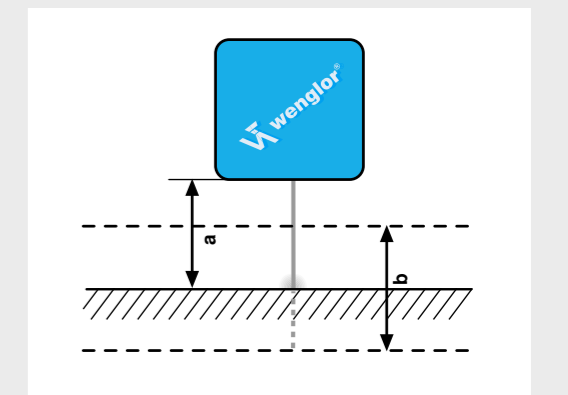
Mounting Bracket WM2

Ctrl. Panel



- 01 = Switching Status Indicator
- 08 = NO/NC Switch
- 17 = Sensitivity Adjustment

Ideal Working Distance



a = Working Distance
b = Working Range