

Fiber-Optic Cable Sensor

UM55PA2

Part Number



- **Switching distance adjuster**
- **Switching frequency: 1 kHz**

Technical Data

Optical Data

Range	500 mm
Switching Hysteresis	< 15 %
Light Source	Infrared Light
Wavelength	880 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	12 °

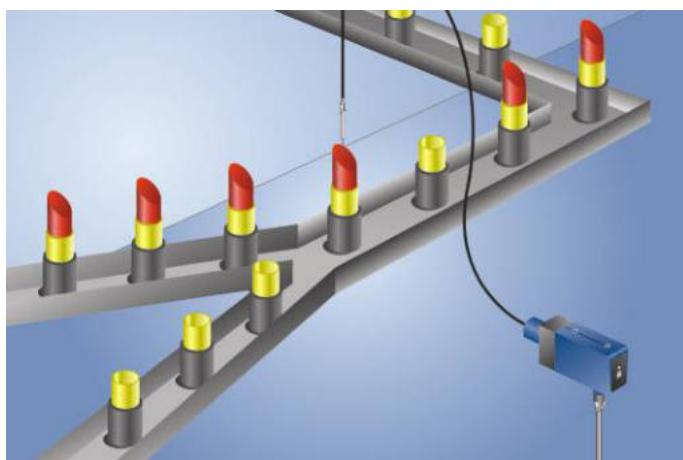
Electrical Data

Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
Switching Frequency	1 kHz
Response Time	500 µs
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
PNP Switching Output/Switching Current	200 mA
Residual Current Switching Output	< 50 µA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III

Mechanical Data

Setting Method	Potentiometer
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 x 1; 4-pin
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	M4
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	360
Suitable Fiber-Optic Cable Adapter No.	02

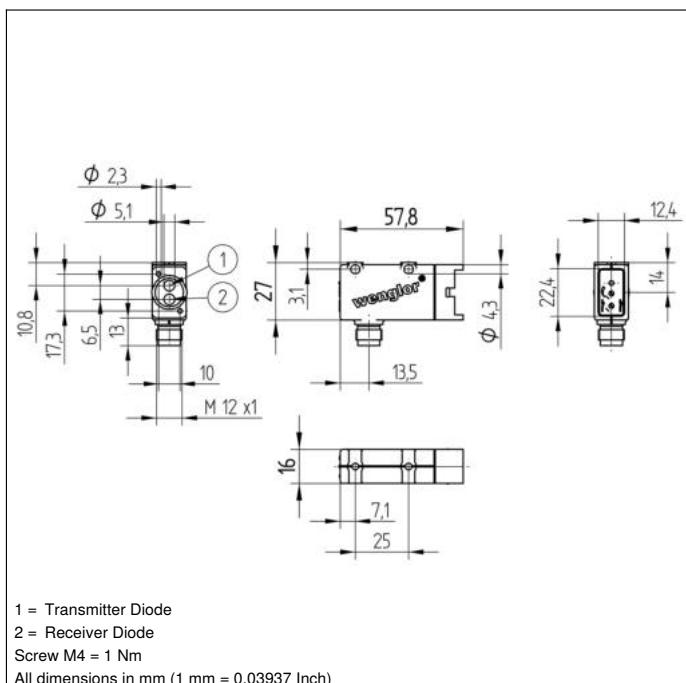
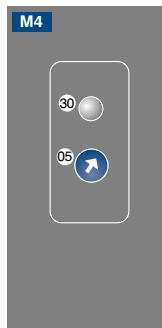
These sensors are equipped for use with glass fiber optic cables but can be used with or without one. The transmitter and receiver are located in a single housing. The sensor evaluates transmitted light reflected back from the object and the output is switched as soon as an object passes the selected range. Bright objects reflect more light than dark objects, and can thus be recognized from greater distances.



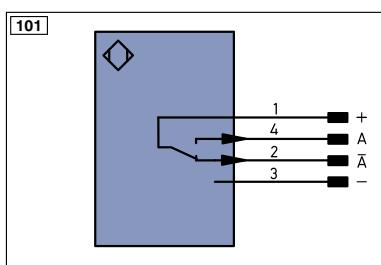
Complementary Products

Glass Fiber-Optic Cable

PNP-NPN Converter BG2V1P-N-2M


Ctrl. Panel


05 = Switching Distance Adjuster
30 = Switching Status/Contamination Warning


Legend

PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ü	Test Input inverted
W	Trigger Input
W-	Ground for the Trigger Input
O	Analog Output
O-	Ground for the Analog Output
BZ	Block Discharge
Awv	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY-	Ground for the Synchronization
E+	Receiver-Line
E-	Emitter-Line
±	Grounding
SnR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactor Monitoring

EN0RS422 Encoder A/A (TTL)
EN0RS422 Encoder B/B (TTL)
ENA Encoder A
ENB Encoder B
AMIN Digital output MIN
AMAX Digital output MAX
AOK Digital output OK
SY IN Synchronization IN
SY OUT Synchronization OUT
OLT Brightness output
M Maintenance
rsv reserved

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

