

Reflex Sensor

TC22PA3

Part Number



- Adjustable detection range
- Stainless steel housing

Technical Data

Optical Data

Range	200 mm
Switching Hysteresis	< 15 %
Light Source	Infrared Light
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 (U _b = 24 V)	< 40 mA
Switching Frequency	1500 Hz
Response Time	330 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	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin

PNP NO/NC antivalent



Connection Diagram No.

101

Control Panel No.

D6

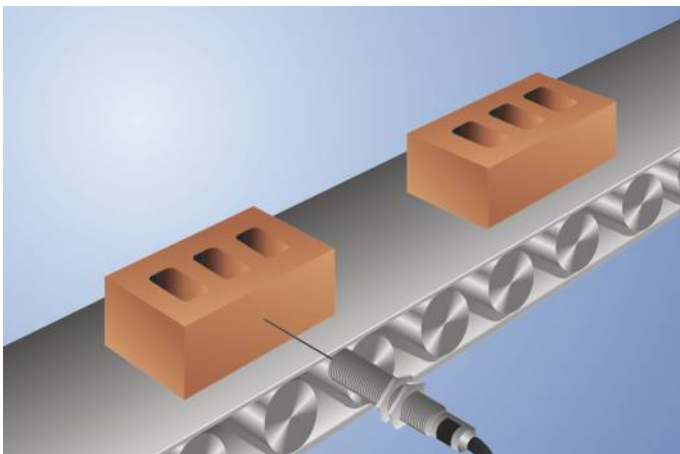
Suitable Connection Equipment No.

2

Suitable Mounting Technology No.

150

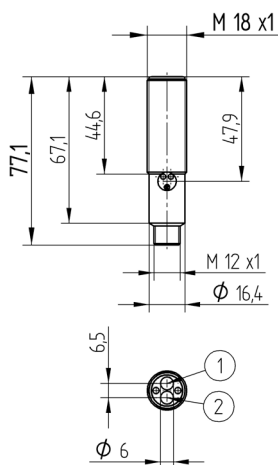
The transmitter and receiver in these sensors are located in a single housing. The sensor evaluates transmitted light reflected back from the object. The output is switched as soon as an object passes the selected range. Bright objects reflect more light than dark objects, and can thus be recognized from greater distances.



Complementary Products

Dust Extraction Tube STAUBTUBUS-01

PNP-NPN Converter BG2V1P-N-2M



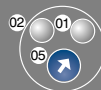
1 = Receiver Diode
2 = Transmitter Diode

All dimensions in mm (1 mm = 0.03937 Inch)



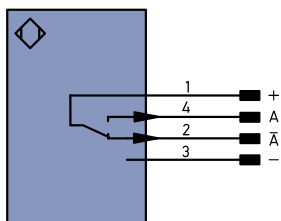
Ctrl. Panel

D6



01 = Switching Status Indicator
02 = Contamination Warning
05 = Switching Distance Adjuster

101



Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	U	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	AWV	Valve Output
S	Shielding	a	Valve Control Output +
RxD	Interface Receive Path	b	Valve Control Output 0 V
TxD	Interface Send Path	SY	Synchronization
RDY	Ready	SY-	Ground for the Synchronization
GND	Ground	E+	Receiver-Line
CL	Clock	S+	Emitter-Line
E/A	Output/Input programmable	±	Grounding
IO-Link	IO-Link	SnR	Switching Distance Reduction
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path
IN	Safety Input	Tx+/-	Ethernet Send Path
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)
Signal	Signal Output	La	Emitted Light disengageable
BL-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation
EN0-PS422	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation
		EDM	Contacting Monitoring

ENAR5422	Encoder A/Ā (TTL)
ENBPS422	Encoder B/B̄ (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

