

Reflex Sensors

with Background Suppression

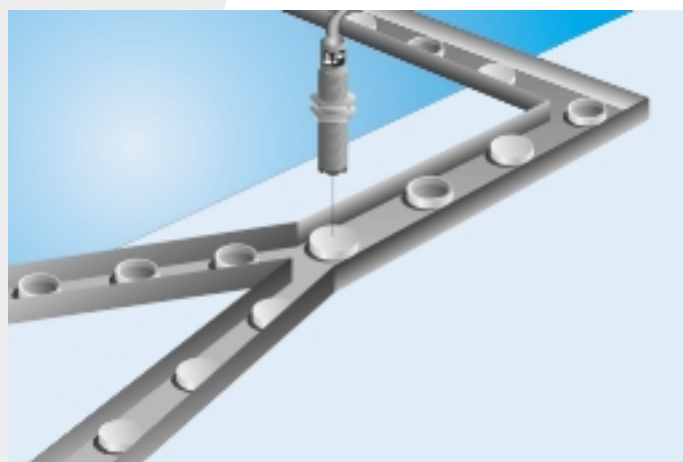
HO08PA3

Part Number



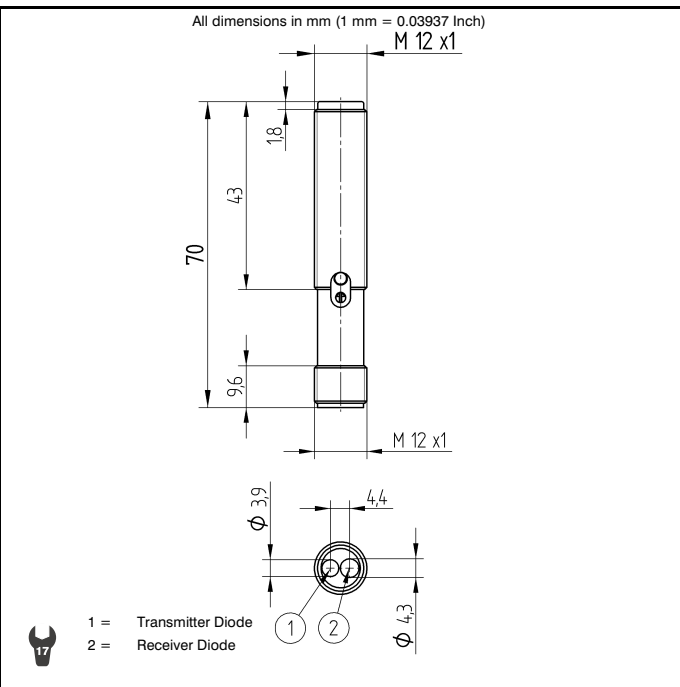
- Adjustable Switching Distance
- Excellent Ambient Light Suppression
- High Switching Frequency
- Large Detection Range

These sensors are particularly well suited for recognizing objects in front of any type of background. The colour, shape and surface characteristics of the object have practically no influence on sensor switching performance. Also these sensors don't influence each other if their light spots are pointed onto the same spot or against each other.



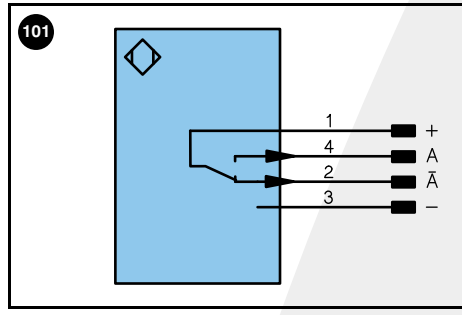
Technical Data

Optical Data	
Range	80 mm
Adjustable Range	25...80 mm
Switching Hysteresis	< 5 %
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	1 kHz
Response Time	500 µs
Temperature Drift	< 5 %
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	
Housing	BrasNicPlated
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1



Specifications are subject to change without notice
13/06

Part Number	Plug Version
	HO08PA3
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	03
Suitable Plug No.	2



Legend			
+	Power supply "+"	U	Test input
-	Power supply "0V"	W	Trigger input
-	Power supply (AC Voltage)	O	Analog output (1,2,3...)
A	Switching output (1,2,3...) / NO	O-	Ground for the analog output
A	Switching output (1,2,3...) / NC	BZ	Block discharge
V	Contamination / Error output (NO)	Aw	Valve output
V	Contamination / Error output (NC)	a	Valve control output "+"
E	Input (analog or digital)	b	Valve control output "0V"
T	Teach input	SY	Synchronization
Z	Time delay (activation)	E+	Receiver-Line
S	Shielding	S+	Emitter-Line
RxD	RS-232 receive path	+	Grounding
TxD	RS-232 send path	S-P	Switching Distance Reduction
RDY	Ready	USBD+	USB data +
GND	Ground	USBD-	USB data -
CL	Clock	Ba	Interfaces-Bus A(+)/B(-)
		La	Emitted light disengageable

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

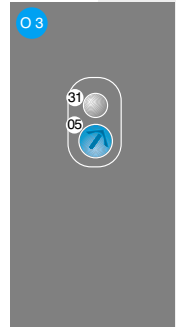
Table 1

Range	40 mm	60 mm	80 mm
Light Spot Diameter	3 mm	5 mm	7 mm

Accessories

- Mounting Clamp BSM12B
- Mounting Bracket W12

Ctrl.Panel



05 = Switching Distance Adjuster
31 = Switching Status/Contamination- / Short Circuit Warning

Switching Distance Deviation

Typical characteristic curve based on Kodak white, 90%

