

# Reflex Sensors

with Background Suppression

# HB03PDT7K

Part Number



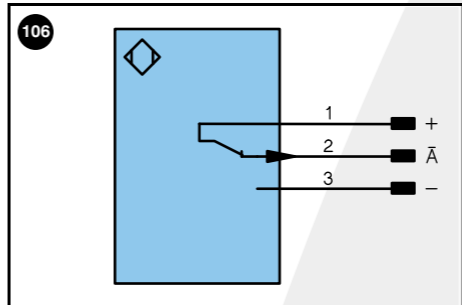
- Adjustable Switching Distance
- Electronic Background Suppression
- Enclosed in M8 housing
- Red Light



### Technical Data

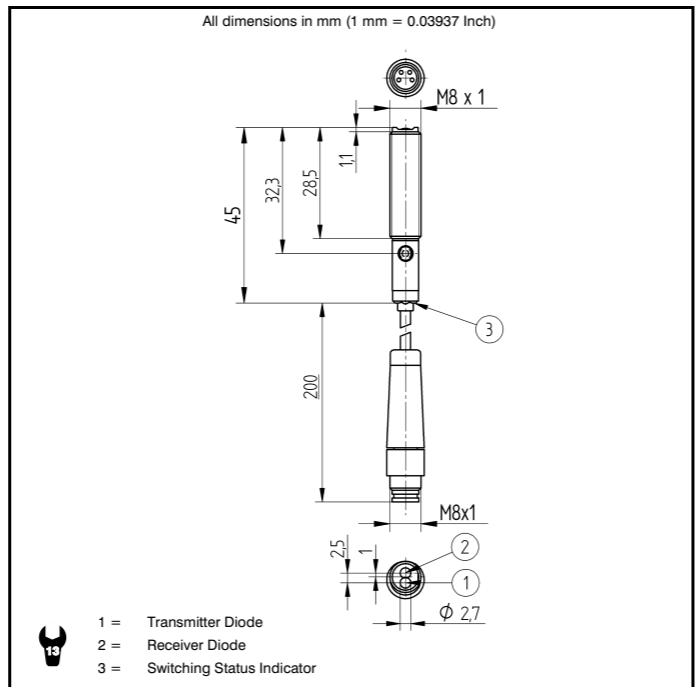
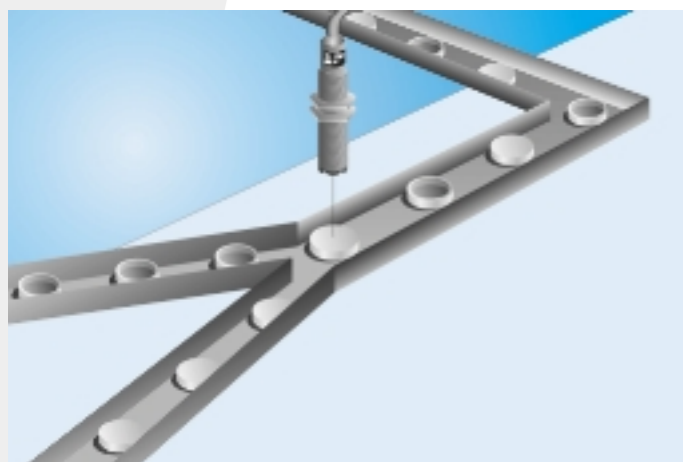
Optical Data	
Range	30 mm
Adjustable Range	10...30 mm
Switching Hysteresis	< 10 %
Light Source	Red Light
Service Life (T = +25°C)	100000 h
max. Ambient Light	10000 Lux
Light Spot Diameter	2 mm
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24V)	< 25 mA
Switching Frequency	600 Hz
Response Time	833 μs
Temperature Drift	< 5 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Adjustment	Teach-In
Housing	Stainless Steel
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M8 x 1
Cabel Length	20 cm

Part Number	Plug Version
HB03PDT7K	
PNP NC	●
Connection Diagram No.	106
Control Panel No.	B 1
Suitable Plug No.	7



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

These sensors are particularly well suited for recognizing objects in front of any type of background. The color, shape and surface characteristics of the object have practically no influence on sensor switching performance.



### Accessories

- Mounting Clamp BSM8NB
- Fixation System W8S12

### Ctrl.Panel



06 = Teach Button