

Inductive Sensor

with Increased Switching Distance

I03H004

Part Number



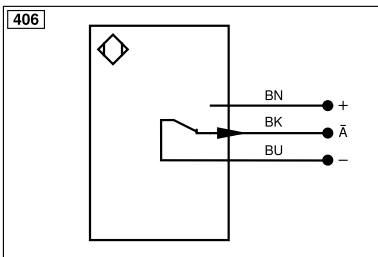
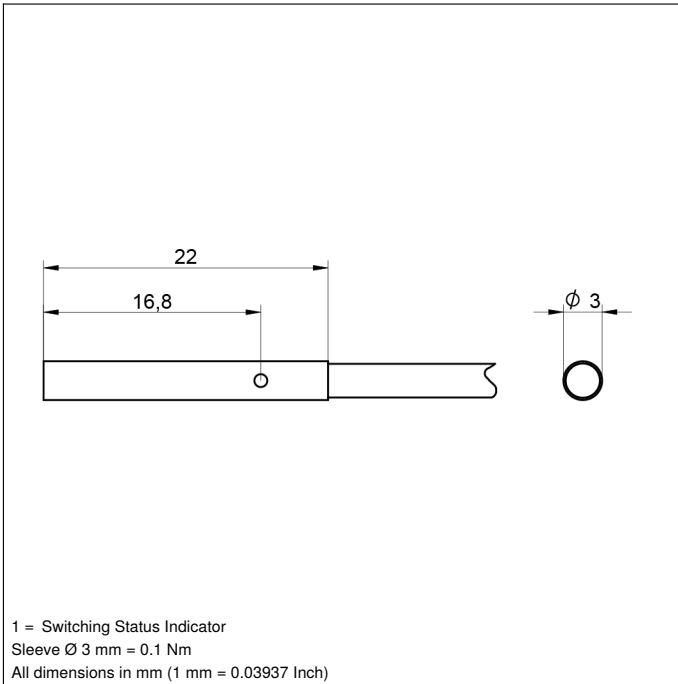
- High switching frequency of 3,000 Hz
- Increased switching distance
- Integrated LED adjustment tool
- Miniature stainless steel design

These inductive sensors feature increased switching distances and high switching frequencies in a miniature design. This provides effective detection of end positions and the smallest of parts, even in very confined spaces, and it means they can be used in fast assembly processes. The robust stainless steel housing and the integrated, bright LED adjustment tool ensure easy installation and a long service life.



Technical Data

Inductive Data	
Switching Distance	1 mm
Correction Factors Stainless Steel V2A/CuZn/Al	0,80/0,60/0,50
Mounting	Flush
Mounting A/B/C/D in mm	1/2/3/0
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	≤ 10 mA
Switching Frequency	3000 Hz
Temperature Drift	≤ 10 %
Temperature Range	-25...70 °C
Switching Output Voltage Drop	< 2 V
Switching Output/Switching Current	≤ 100 mA
Residual Current Switching Output	≤ 0,1 μA
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	V2A stainless steel, POM
Degree of Protection	IP67
Connection	Cable, 3-wire, 2 m
Cable Jacket Material	PUR
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3110 a
Function	
LED adjustment tool	yes
NPN NC	●
Connection Diagram No.	406
Suitable Mounting Technology No.	924



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
		ENBRs422	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 60757	
		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

Mounting

