### Inductive Sensor with Increased Switching Distance

# **I1BH019**

Part Number



- Increased switching distance
- Innovative ASIC circuit technology
- Integrated error display
- Minimal mounting clearance thanks to wenglor weproTec

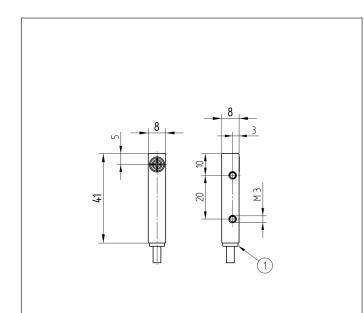
#### **Technical Data**

Inductive Data						
Switching Distance	2 mm					
Correction Factors Stainless Steel V2A/CuZn/Al	1,16/0,70/0,67					
Mounting	flush					
Mounting A/B/C/D in mm	0/9/6/0					
Mounting B1 in mm	03					
Switching Hysteresis	< 10 %					
Electrical Data						
Supply Voltage	1030 V DC					
Current Consumption (Ub = 24 V)	< 10 mA					
Switching Frequency	920 Hz					
Temperature Drift	< 10 %					
Temperature Range	-4080 °C					
Switching Output Voltage Drop	< 1 V					
Switching Output/Switching Current	150 mA					
Residual Current Switching Output	< 100 µA					
Short Circuit Protection	yes					
Reverse Polarity and Overload Protection	yes					
Protection Class III						
Mechanical Data						
Housing Material	Plastic					
Degree of Protection	IP67					
Connection	Cable, 3-wire, 2 m					
Cable Jacket Material	PVC					
Safety-relevant Data						
MTTFd (EN ISO 13849-1) 3706,54 a						
Function						
Error Indicator	or yes					
NPN NC						
Connection Diagram No.	406					

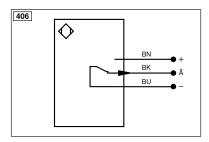
\* Temperature range with permanently installed cable, bending radius: > 40 mm

Inductive Sensors with increased switching distances are distinguished by rugged design, easy installation and reliable measured values. The large range makes additional types of sensor superfluous because they can also be used to implement special applications. In addition to error-free operation of several sensors in a very small space, the new generation also provides the possibility of detecting system errors before it's too late thanks to ASIC und wenglor weproTec.





# 1 = Switching Status Indicator Screw M3 = 0,5 Nm All dimensions in mm (1 mm = 0.03937 Inch)



Legend						
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B (TTL)	
-	Supply Voltage 0 V	U	Test Input	ENa	Encoder A	
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENв	Encoder B	
A	Switching Output (NO)	W	Trigger Input	Amin	Digital output MIN	
Ā	Switching Output (NC)	VV-	Ground for the Trigger Input	Amax	Digital output MAX	
V	Contamination/Error Output (NO)	0	Analog Output	Аок	Digital output OK	
V	Contamination/Error Output (NC)	0-	Ground for the Analog Output	SY In	Synchronization In	
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT	
Т	Teach Input	Amv	Valve Output	Olt	Brightness output	
Z	Time Delay (activation)	а	Valve Control Output +	Μ	Maintenance	
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved	
RxD	Interface Receive Path	SY	Synchronization	Wire Colo	/ire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black	
RDY	Ready	E+	Receiver-Line	BN	Brown	
GND	Ground	S+	Emitter-Line	RD	Red	
CL	Clock	±	Grounding	OG	Orange	
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow	
0	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green	
PoE	ower over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue	
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet	
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey	
Signal	Signal Output	Mag	Magnet activation	WH	White	
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink	
EN0 RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow	
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)			

## Mounting

