## Inductive Sensor

with Increased Switching Distance

## I1AH003

Part Number



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

Inductive Data			
Switching Distance	2 mm		
Correction Factors Stainless Steel V2A/CuZn/Al	0,78/0,45/0,42		
Mounting	flush		
Mounting A/B/C/D in mm	0/9/6/0		
Mounting B1 in mm	02		
Switching Hysteresis	< 10 %		
Electrical Data			
Supply Voltage	1030 V DC		
Current Consumption (Ub = 24 V)	< 5 mA		
Switching Frequency	1120 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	CuZn, nickel-plated		
Degree of Protection	IP67		
Connection M8 × 1; 3-pin			
Safety-relevant Data			
MTTFd (EN ISO 13849-1)	3706,54 a		
Function			
Error Indicator	yes		
PNP NO	•		
Connection Diagram No.	102		
Suitable Connection Equipment No.	8		
Suitable Mounting Technology No.	240		

**Technical Data** 

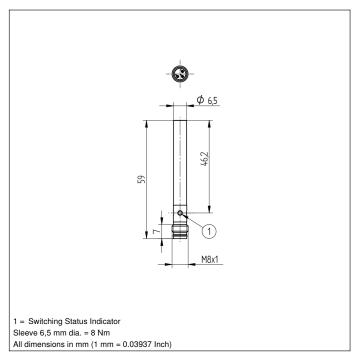
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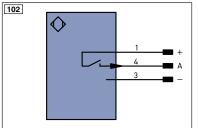
Inductive Sensors with increased switching distances are distinguished by rugged design, easy installation and reliable measured values. The large range makes additional types of sensor superfluous because they can also be used to implement special applications. In addition to error-free operation of 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.

## **Complementary Products**

PNP-NPN Converter BG8V1P-N-2M







Legend		PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		
+	Supply Voltage +		nc	not connected	ENBR5422	Encoder B/B (TTL)	
-	Supply Voltage 0 V		U	Test Input	ENA	Encoder A	
~	Supply Voltage (AC Voltage)		Ū	Test Input inverted	ENB	Encoder B	
Α	Switching Output	(NO)	W	Trigger Input	Amin	Digital output MIN	
Ā	Switching Output	(NC)	W -	Ground for the Trigger Input	Амах	Digital output MAX	
٧	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		Awv	Valve Output	OLT	Brightness output	
Z	Time Delay (activation)		а	Valve Control Output +	М	Maintenance	
S	Shielding		b	Valve Control Output 0 V	rsv	reserved	
RxD	Interface Receive Path		SY	Synchronization		Wire Colors according to DIN IEC 757	
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	
•	IO-Link		Rx+/-	Ethernet Receive Path	GN	Green	
PoE	Power 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		White	
BI_D+/-	- Ethernet Gigabit bidirect. data	a line (A-D)	RES	Input confirmation	PK	Pink	
ENors42	Encoder 0-pulse 0-0 (TTL)		EDM	Contactor Monitoring	GNYE	Green/Yellow	

## Mounting

