

Inductive Sensor

with Increased Switching Distance

I12H051

Part Number



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

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.

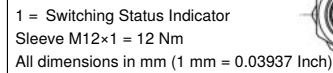
weproTec

Technical Data

Inductive Data	
Switching Distance	4 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,02/0,54/0,52
Mounting	flush
Mounting A/B/C/D in mm	0/8/12/0
Mounting B1 in mm	0...2
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 7 mA
Switching Frequency	1090 Hz
Temperature Drift	< 10 %
Temperature Range	-40...80 °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	M12 × 1; 4-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3706,54 a
Function	
Error Indicator	yes
PNP NO/NC antivalent	●
Connection Diagram No.	101
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	170 171

Complementary Products

PNP-NPN Converter BG2V1P-N-2M



Legend					
+	Supply Voltage +	nc	Not connected	EN _{BRS422}	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	EN _A	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	EN _B	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	ACK	Digital output OK
ȳ	Contamination/Error Output (NC)	Q-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	AMV	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization		
RDY	Ready	E+	Receiver-Line	BK	Black
GND	Ground	S+	Emitter-Line	BN	Brown
CL	Clock	±	Grounding	RD	Red
E/A	Output/Input programmable	SnR	Switching Distance Reduction	OG	Orange
	IO-Link	Rx+/-	Ethernet Receive Path	YE	Yellow
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	GN	Green
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	BU	Blue
QSSD	Safety Output	La	Emitted Light disengageable	VT	Violet
Signal	Signal Output	Mag	Magnet activation	GY	Grey
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	WH	White
EN _{0 RS422}	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contacting Monitoring	PK	Pink
PT	Platinum measuring resistor	EN _{A RS422}	Encoder A/Ā (TTL)	GNYE	Green/Yellow

Mounting

