

Inductive Sensor with IO-Link

I12H019

Part Number



- Easy sensor configuration using the IO-Link interface
- Innovative ASIC circuit technology
- Integrated error display and error output
- Minimal mounting clearance thanks to wenglor weproTec

The Inductive Sensors have not only been equipped with ASIC, but rather with an IO-Link interface as well for ideal integration into networks. As a result, a total of three switching distances and two switching frequencies can be selected, and PNP/NPN as well as NO/NC/antivalent options can be set as desired. This reduces the number of variants while simultaneously expanding the scope of functions.

weproTec

Technical Data

Inductive Data

Switching Distance	6 mm
Standard Target	18 x 18 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,11/0,53/0,50
Mounting	semi-flush
Mounting A/B/C/D in mm	12/26/18/4
Mounting B1 in mm	0...13
Switching Hysteresis	< 10 %

Electrical Data

Supply Voltage	10...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (Ub = 24 V)	< 12 mA
Switching Frequency	770 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
Interface	IO-Link V1.1
Protection Class	III

Mechanical Data

Housing Material	CuZn, nickel-plated
Degree of Protection	IP67
Connection	M12 x 1; 4-pin

Safety-relevant Data

MTTFd (EN ISO 13849-1)	3706,54 a
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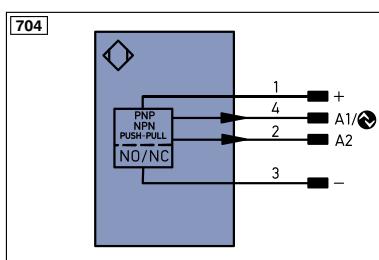
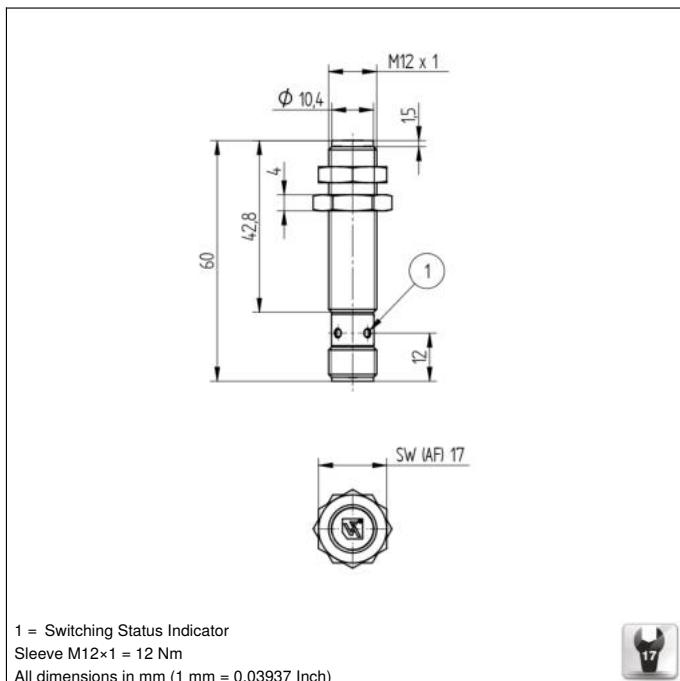
Function

Error Indicator	yes
Programmable switching distance	4/5/6 mm
Programmable switching frequency	yes
IO-Link	●
Switchable to NC/NO	●
Configurable as PNP/NPN/Push-Pull	●
Programmable error output	●
Connection Diagram No.	704
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	170 172

Complementary Products

IO-Link Master

Software


Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	Ü	Test Input inverted
Å	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Å	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	Awv	Valve Output
S	Shielding	a	Valve Control Output +
		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	E-	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
SSO	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BLD	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
EN0RS422	Encoder 0-pulse 0-0 (TTL)	EDM	Contactor Monitoring

EN0RS422 Encoder A/A (TTL)

EN0RS422 Encoder B/B (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 757

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
