

Inductive Sensor with IO-Link

I1QH005

Part Number

weproTec



- 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

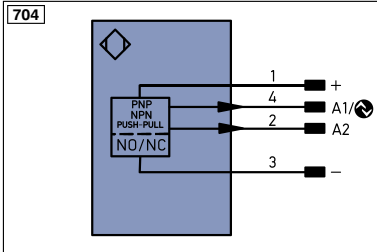
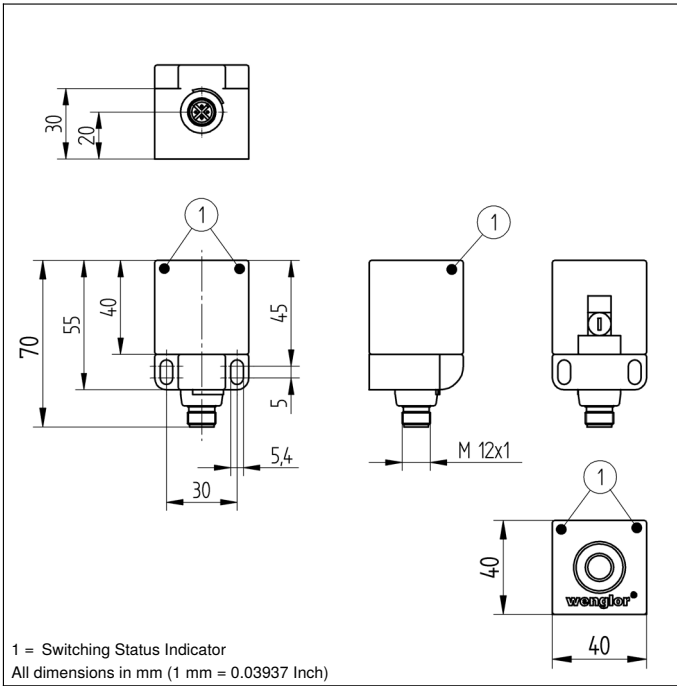
The Inductive Sensors have not only been equipped with ASIC, but rather with an IO-Link interface as well for ideal integration into networks. As a result, a total of three switching distances and two switching frequencies can be selected, and PNP/NPN as well as NO/NC/antivalent options can be set as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

Technical Data

Inductive Data	
Switching Distance	20 mm
Standard Target	60 × 60 mm
Correction Factors Stainless Steel V2A/CuZn/Al	0,83/0,32/0,31
Mounting	flush
Mounting A/B/C/D in mm	0/40/60/0
Mounting B1 in mm	6...35
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (U _b = 24 V)	< 15 mA
Switching Frequency	700 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	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3706,54 a
Function	
Error Indicator	yes
Programmable switching distance	12/15/20 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

Complementary Products

IO-Link Master
Software



Legend		Legend		Legend	
+	Supply Voltage +	PT	Platinum measuring resistor	EN _{A/RS422}	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN _{B/RS422}	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN _A	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN _B	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A _{MIN}	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A _{MAX}	Digital output MAX
ṽ	Contamination/Error Output (NC)	O	Analog Output	A _{OK}	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY _{in}	Synchronization In
T	Teach Input	BZ	Block Discharge	SY _{OUT}	Synchronization OUT
Z	Time Delay (activation)	A _{MV}	Valve Output	OL _T	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to DIN IEC 757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
	IO-Link	S _n R	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	L _a	Emitted Light disengageable	GY	Grey
BI...D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN _{0/RS422}	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNYE	Green/Yellow

Mounting

