

Inductive Sensor with Increased Switching Distance

I30H023

Part Number

weproTec

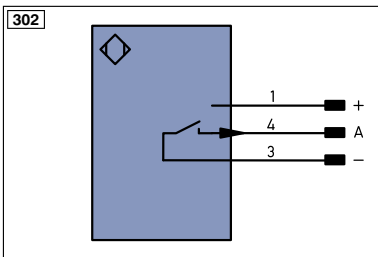
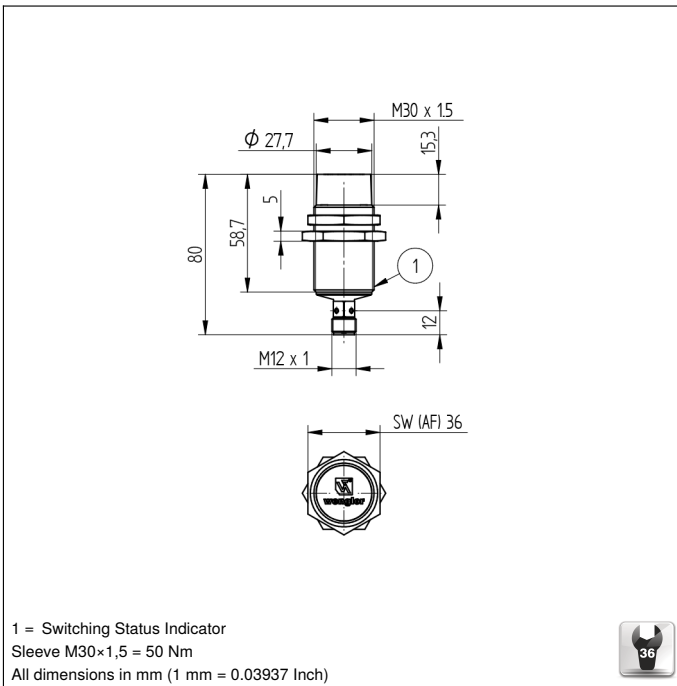



- Increased switching distance
- Innovative ASIC circuit technology
- Integrated error display
- Minimal mounting clearance thanks to wenglor weproTec

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.

Technical Data

Inductive Data	
Switching Distance	35 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,00/0,42/0,39
Mounting	non-flush
Mounting A/B/C/D in mm	55/82/105/35
Mounting B1 in mm	0...80
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 12 mA
Switching Frequency	140 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; 3-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3706,54 a
Function	
Error Indicator	yes
NPN NO	●
Connection Diagram No.	302
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	130



Legend		
+ Supply Voltage +	PT Platinum measuring resistor	EN^{A/RS422} Encoder A/ \bar{A} (TTL)
- Supply Voltage 0 V	nc not connected	EN^{B/RS422} Encoder B/ \bar{B} (TTL)
~ Supply Voltage (AC Voltage)	U Test Input	EN_A Encoder A
A Switching Output (NO)	\bar{U} Test Input inverted	EN_B Encoder B
\bar{A} 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
\bar{V} 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_{WV} Valve Output	OL_T Brightness output
S Shielding	a Valve Control Output +	M Maintenance reserved
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	\pm Grounding	OG Orange
 IO-Link	S_{nR} 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
Bl_D+/- Ethernet Gigabit bidirect. data line (A-D)	Mag Magnet activation	WH White
EN^{0/RS422} Encoder 0-pulse 0-0 (TTL)	RES Input confirmation	PK Pink
	EDM Contactor Monitoring	GNYE Green/Yellow

Mounting

