

Inductive Sensor with Analog Output

IW045CM65MG3

Part Number



Technical Data

Inductive Data

Working Range	1,5...4,5 mm
Measuring Distance	3 mm
Measuring Range	3 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,2/1,2/1,2
Mounting	flush
Mounting A/B/C/D in mm	0/18/13,5/0
Standard Target FE360, thickness 1 mm	18 × 18 mm
Linearity	< 1 %
Resolution	1 μm

Electrical Data

Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 30 mA
Cut-Off Frequency	900 Hz
Temperature Drift (-10 °C < T _u ≤ 50 °C)	5 μm/K
Temperature Drift (50 °C < T _u ≤ 70 °C)	6 μm/K
Temperature Range	-10...70 °C
Analog Output	0...10 V
Load Current Voltage Output	< 1 mA
Resistant to Magnetic Fields	yes
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

Mechanical Data

Housing Material	CuZn, nickel-plated
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin

Analog Output



Connection Diagram No.

510

Suitable Connection Equipment No.

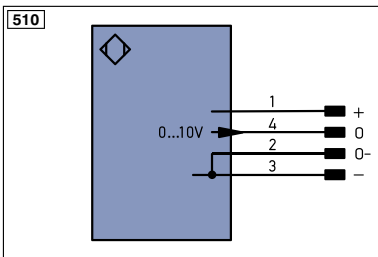
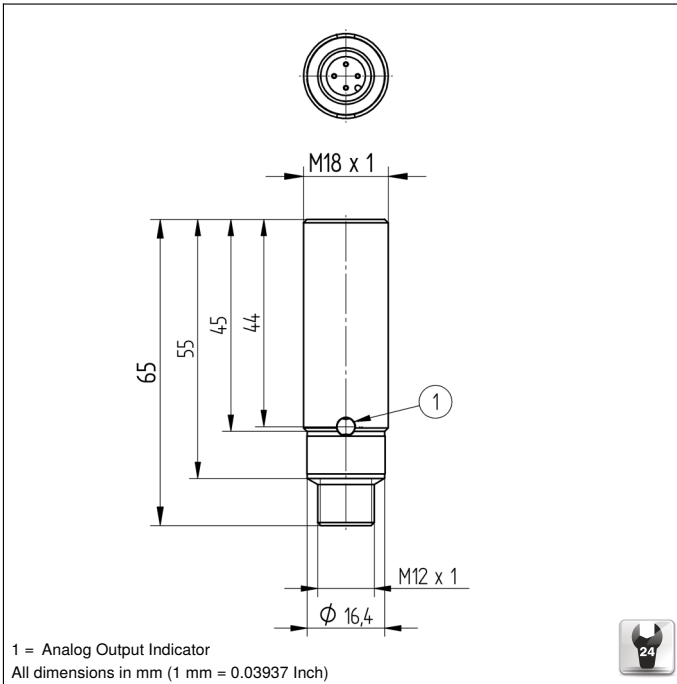
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Suitable Mounting Technology No.

150

Complementary Products

Analog Evaluation Unit AW02



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)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ṽ	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)	AMV	Valve Output
S	Shielding	a	Valve Control Output +
RxD	Interface Receive Path	b	Valve Control Output 0 V
TxD	Interface Send Path	SY	Synchronization
RDY	Ready	SY-	Ground for the Synchronization
GND	Ground	E+	Receiver-Line
CL	Clock	S+	Emitter-Line
E/A	Output/Input programmable	±	Grounding
	IO-Link	SnR	Switching Distance Reduction
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path
IN	Safety Input	Tx+/-	Ethernet Send Path
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)
Signal	Signal Output	La	Emitted Light disengageable
Bl..D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation
EN0..5A2Z	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation
		EDM	Contactur Monitoring
		EN0..5A2Z	Encoder A/Ā (TTL)
		EN0..5B2Z	Encoder B/B̄ (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
		GNVE	Green/Yellow

Mounting

